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STANFORD RESEARCH INST MENLO PARK CALIF
ALTERNATIVE AUTOMATED DATA PROCESSING SYSTEM CONCEPTS FOR SUPPO--ETC(U)
JUN 77 L S PETERS, K R AUSICH, G F WALLACE

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Naval Warfare Research Center
Final Report

June 1977

**ALTERNATIVE AUTOMATED DATA PROCESSING
SYSTEM CONCEPTS FOR SUPPORT OF THE FMF
(1980-1990)**

**Volume II: FMF Information Processing
Requirements**

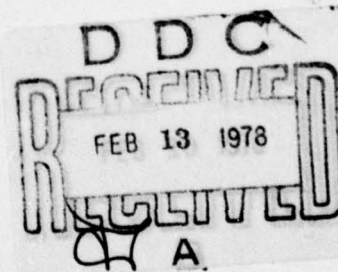
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CONTRACT N00014-76-C-0582

SRI Project 4950



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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) ALTERNATIVE AUTOMATED DATA PROCESSING SYSTEM CONCEPTS FOR SUPPORT OF THE FMF (1980-1990) ✓ Volume II: FMF Information Processing Requirements		5. TYPE OF REPORT & PERIOD COVERED FINAL REPORT
7. AUTHOR(s) L. S. Peters K. R. Ausich G. F. Wallace		6. PERFORMING ORG. REPORT NUMBER SRI Project 4950 ✓
9. PERFORMING ORGANIZATION NAME AND ADDRESS Stanford Research Institute 333 Ravenswood Avenue Menlo Park, California 94025 ✓		8. CONTRACT OR GRANT NUMBER(s) N00014-76-C-0582 ✓
11. CONTROLLING OFFICE NAME AND ADDRESS Commandant of the Marine Corps Headquarters, U.S. Marine Corps Washington, D.C. 20380		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if diff. from Controlling Office) Office of Naval Research (Code 230) Department of the Navy Arlington, Virginia 22217		12. REPORT DATE June 1977
16. DISTRIBUTION STATEMENT (of this report) Approved for public release Distribution unlimited		13. NO. OF PAGES 122
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from report)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
18. SUPPLEMENTARY NOTES 3- A649 785 5-A049 786 No Cont		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) ADP Systems, Marine Corps Automated data processing Military computers Information processing ADP requirements		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This document is one volume of a five volume final report that describes the results of a study effort to identify alternative ADP concepts for the Fleet Marine Force (FMF) during the 1980s. The focus of the study was the administrative type information processing associated with the management of manpower, operations, and logistics activities of the FMF rather than the tactical control activities. The goal of the study was to define alternative ADP concepts that could serve the FMF's need in garrison, afloat, and within a combat area. A systematic analysis approach was employed that analyzed requirements, ADP technology, ADP system architectures, operational effectiveness, and system cost. The individual volumes of the final		

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III VI

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

19. KEY WORDS (Continued)

20 ABSTRACT (Continued)

report are titled: Volume I: Study Overview and Results; Volume II: FMF Information Processing Requirements; Volume III: ADPS Technology Estimate for the 1980s; Volume IV: Description and Analysis of Alternative ADPS Concepts; Volume V: Cost Analysis for Alternative ADPS Concepts.

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STANFORD RESEARCH INSTITUTE
Menlo Park, California 94025 - U S A

Naval Warfare Research Center

(9) Final Report

(11) June 77

(12) 120 p.

(6)

**ALTERNATIVE AUTOMATED DATA PROCESSING
SYSTEM CONCEPTS FOR SUPPORT OF THE FMF
(1980-1990)**

**Volume II: FMF Information Processing
Requirements**

(10)

By L. S. PETERS, K. R. AUSICH, G. F. WALLACE

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SRI Project 4950

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GLOSSARY

AAW	Anti-air warfare
Admin/Log Plan	Administrative/logistics Plan
ADP	Automated data processing
ADPE	Automated data processing equipment
ADPS	Automated data processing system
ADS	Automated data system
ASC	Automated service center
CAP	Combat air patrol
CLF	Commander landing force
CSS	Combat service support
EEI	Essential elements of information
FASC	Force automated service center
FEBA	Forward edge of the battle area
FIS	Force information system
FMF	Fleet Marine Force
FMFM	Fleet Marine Force manual
FORSTHT	Force Status and Identity Reporting System
FREDS	Flight Readiness Evaluation Data System
FSCL	Fire support coordination line
FSSG	Force service support group
H&MS	Headquarters and maintenance squadron
HQMC	Headquarters Marine Corps
INTREP	Intelligence report
INTSUM	Intelligence summary
JUMPS/MMS	Joint Uniform Military Pay System/Manpower Management System
LCC	Landing force command and control ship
LF	Landing force
LVT	Landing vehicle tracked
LVTH	Landing vehicle tracked howitzer

MAB	Marine amphibious brigade
MAF	Marine amphibious force
MAGFARS	Marine Air-Ground Financial Accounting and Reporting System
MAGIS	Marine Air-Ground Intelligence System
MAGTF	Marine air-ground task force
MAU	Marine amphibious unit
MAW	Marine air wing
MCASC	Marine Corps automated service center
MCDEC	Marine Corps Development and Education Command
MCTSSA	Marine Corps Tactical Systems Support Activity
MILOGS	Marine Integrated Logistics System
MIMMS	Marine Corps Integrated Maintenance Management System
MIPS	Marine Integrated Personnel System
MOS	Military occupational specialty
MSDO	Navy Management System Development Office
MTACCS	Marine Tactical Command and Control System
MUMMS	Marine Corps Unified Material Management System
3M	Navy Maintenance and Material Management System
NALCOMIS	Naval Aviation Logistics Command Management Information System
NELC	Naval Electronics Laboratory Center
NFL	No fire line
Ops Plan	Operations Plan
POW	Prisoner of war
SASSY	Supported Activities Supply System
SOP	Standard operating procedure
SUADPS-EU	Shipboard Uniform Automated Data Processing System for End Use
TCO	Tactical Combat Operations System
T/O	Table of organization
TMR	Table of Manpower Requirements System

PREFACE

This volume is part of the final report of SRI Research Project No. 4950, entitled "Alternative Automated Data Processing System Concepts for Support of the FMF (1980-1990)."* SRI initiated this 20-month study in November 1975 for Headquarters, U.S. Marine Corps under Contract No. N00014-76-C-0582 from the Office of Naval Research. HQMC project management was initially provided by the Information Systems Support and Management Division, now a part of the Command, Control, Communications, and Computer Systems Division.

The study followed the approach described in the SRI Study Plan, "Alternative Automated Data System Concepts for Support of the FMF (1980-1990)," dated 1 January 1976--as approved and modified by CMC letter RDS/ISMS-11-pmb 5230/1 dated 26 Mar 76.

This is Volume II of the final report which consists of five volumes whose titles are:

- Volume I : Study Overview and Results
- Volume II : FMF Information Processing Requirements
- Volume III: ADPS Technology Estimate for the 1980s
- Volume IV : Description and Analysis of Alternative ADPS Concepts
- Volume V : Cost Analysis for Alternative ADPS Concepts.

*As defined by governing Marine Corps documents, an automated data processing system (ADPS) is an interacting assembly of procedures, processes, methods, personnel, communications, and automatic data processing equipment (ADPE) to perform a series of data processing operations--a combination of automatic data processing resources and automated data systems. An automated data system (ADS) is an assembly of procedures, processes, methods, routines, or techniques (including but not limited to computer programs) united by some form of regulated interaction to form an organized whole, specifically designed to make use of ADPE.

Volume I describes the research objectives and provides an overview of the entire project, along with a comprehensive study bibliography. It also includes an Executive Summary.

Much of the material contained in these volumes was published previously in draft form during the course of the project as SRI Technical Notes. However, the material has been revised and reissued in the final report, which then supersedes all the previously published interim and draft material.

I INTRODUCTION

This document reports the results of the SRI research to identify the information processing requirements* that should be considered in developing an automated data processing system (ADPS) for the command and management needs (vice tactical control needs) of the Fleet Marine Force (FMF) during the decade 1980-1990. The goal of this research was to provide a relatively complete and coordinated (though not exhaustive) statement of requirements under one cover. This statement is meant to serve a very definite purpose. That purpose is to document a supporting base for proposing and evaluating ADPS alternatives for future FMF use.

In its documentation, SRI has addressed only those FMF tasks that appear amenable to data processing support and that appear to benefit from such support were it available.

The statement of requirements is complete in the sense that the following factors have been considered: functional management areas, combat elements, echelon levels, FMF operating environments, and data processing tasks. It is not exhaustive, since there was no valid reason for making it so--given the swiftness of technological advance and the propensity of the organization to change.

It should be noted that the requirements that have been identified are not simply a compilation of requirements that can be inferred from the nature of Marine Corps data processing today. In fact, many of the information processing requirements relevant to future ADPS are not reflected in present-day Marine Corps data processing. Where appropriate,

*Information processing requirements refer to those activities that are necessary for systematic collection, manipulation, and dissemination of data useful in the management of an organization and its resources. These activities may be undertaken through either manual processes or automated processes.

SRI has attempted to project future requirements. The SRI study team has continually asked two questions: What are the requirements today? and What should the requirements be in the future?

As an introduction to the SRI approach, this section describes information processing requirements in a four-level hierarchy that includes both general and detailed requirements; it briefly describes FMF organizational considerations that entered into the requirements investigation; and it indicates SRI's methods for identifying and stating the requirements.

A. Hierarchy of Requirements

Four levels of requirements are considered. Characteristics of the levels are summarized in Table 1. At the highest level are requirements that can be considered as the FMF operational responsibilities that call for information-related operational capabilities. These requirements reflect Marine Corps plans for the long-range period and the stringent conditions of modern warfare. They are stated to ensure that detailed requirements of a narrower focus will not diverge from the fundamental goals, missions, and needs of the Marine Corps.

The overall operational capability objective for the command and management information processing systems serving the FMF is:

To provide integrated information to support the FMF commanders in the effective accomplishment of their assigned responsibilities and missions.

To meet this objective, elements and units of the FMF are required to:

- Provide information for continuous and effective resource management within the FMF in the areas of personnel, combat essential equipment, materiel, and finance.
- Provide for responsive accomplishment of information support to higher authorities.
- Provide for the required information interfaces with the unified or specified command automated systems, such as WWMCCS.

Table 1
HIERARCHY OF FMF INFORMATION PROCESSING REQUIREMENTS

Requirement Level	Hierarchy Designation	Description	Focus
1	Information-related operational capability requirements	Identifies ever-present responsibilities of Marine Corps information processing system	General; high level
2	Management functional requirements	Relates generalized management functions to Marine Corps organizational activities and operating environments	Activity focus; environmental dependence
3	ADS functional and performance requirements	Identifies specific echelon tasks that are candidates for automation, and their data processing functional capability requirements if automated	Task specific; environmental dependence; echelon responsibility; data processing capability estimates
4	ADPS design requirements*	Specifies performance, engineering, specifications, compatibility interfaces	Detailed engineering specifications

* Not addressed in this study; however, development of this level of requirements would be a necessary part of a design effort for an ADPS.

- Provide information for internal management of readiness, training, and field operations.
- Provide for information processing through the various stages of mobilization, deployment, and combat.

These high level requirements may be regarded as independent of the environment in which FMF may be operating.

At the second level are the management functional requirements. These are concerned with the information processing activities that must take place if the higher level operational capability requirements are to be satisfied. Organizational concerns of the FMF general/executive staff and the special staff sections are addressed by these requirements. Requirements at this level remain qualitative, but they do reflect the attributes and emphases of the basic FMF operating environments.

SRI's statement of requirements at this level (beginning in Section II) makes use of six generalized management functions whose accomplishment is imperative in a "complete" information processing system. These functions are:

- Planning--an activity to devise a detailed method, formulated beforehand, to accomplish a specific goal.
- Programming--an activity, in support of an overall plan, that allocates resources to specific use and that assigns personnel to particular tasks.
- Evaluating--an activity that is directed toward assessing other activities in relation to preconceived criteria of a plan.
- Monitoring/Inventorying--an activity that keeps track of and updates information describing personnel, materiel assets, and events.
- Forecasting--an activity that identifies in advance alternative options and predicts their likely consequences.
- Supervising/Controlling--an activity that encompasses all decisions and actions, in addition to those embraced in the foregoing, necessary to implement a plan or to meet any organizational or operational objective.

At the third level of the hierarchy are the ADS functional and performance requirements. Such requirements extend those of the second level to introduce echelon-associated tasks that have attributes for which automated data processing appears applicable. They also introduce

the types, capacities, and capabilities of ADP components that would be needed to satisfy FMF echelon tasks, if such tasks were automated. Specifically, they call for the generic capabilities of ADS that satisfy, or implement, the higher level information processing requirements.

SRI's approach to specifying these requirements incorporates a requirements matrix whose elements include the following data processing functions:

- Source Data Entry--the initial recording of data to be processed by a data processing system (for example, the manual entry of data onto a coding form, or the automatic recording of data by a sensor device); and/or the actual entry of data into a data processing system for processing (for example, the reading of magnetic media into a computer or the online interactive entry of data into a computer).
- Processing--the processing of data within a data processing system (either manual or automated); such processing falls into the following broad categories:
 - Data Correction/Validation--the performance of checks on the correctness of entered data.
 - Text Handling--the performance of editing and manipulating operations on textual material.
 - Mathematical Calculation--the performance of arithmetic/numerical operations on data.
 - Information Storage/Retrieval--organizing, storing, selecting, and extracting information; rearranging the order of data and information (that is, sorting, merging, and updating).
 - File Management--the building and maintenance of data bases.
- File Storage--the holding of data or information in files; for example, the storage of information in record books, in the internal computer memory, or in the auxiliary computer memory.
- Data Transmission--the outbound transmission of data to a different data processing facility or to a remotely located user location; for example, the transmission of data over a telephone line, or the transportation of data by a courier.
- Information Output/Display--the output of information from a data processing system for end use by humans; for example, example, the printing of hardcopy reports, or the generation of electronic visual displays.

Description of the ADS functional and performance requirements is completed when each echelon task is: (1) associated with one or more data processing functions, and (2) provided a measure of the necessary capability to fulfill those functions. Table 2 indicates the measures SRI has assigned to each data processing function as a means of associating required levels of capability with specific tasks.

B. Organizational Context

To meet its defined responsibilities the FMF is called upon to provide for task-organized, balanced, air-ground teams of combined arms--each such team under a single commander. These task-organized teams are identified as Marine Air-Ground Task Forces (MAGTFs). In descending order of size and capability, the possible types of MAGTF are the Marine Amphibious Force (MAF), the Marine Amphibious Brigade (MAB), and the Marine Amphibious Unit (MAU).

For the purposes of discerning information-processing relationships and for structuring the statement of requirements, these MAGTFs have been abstracted into notional echelons by SRI. The abstraction for the MAF is indicated in Figure 1. While it is understood that these models do not contain all of the organizational elements, the purpose is to represent major components and echelon levels that could differ in terms of information-processing requirements. A MAB would contain similar agencies, but because of its smaller size it would have a Regiment, Air Group, and Logistic Support Group at the highest echelon. A MAU would, in turn, be composed of the next lower echelon level.

Another key feature of the SRI approach for investigating FMF information requirements was a parallel investigation of three Marine Corps operating environments. These three environments are: the garrison environment, the afloat environment, and the combat ashore environment.

While these three environments share many common requirements, each exhibits some unique requirements. ADPS serving the needs of a MAGTF must be suited to operation in all three environments and to transition

Table 2

PERFORMANCE MEASURES FOR DATA PROCESSING FUNCTIONS

Data Processing Function	Measure of Performance
Source Data Entry	Small (SM) : Less than 10^2 transactions per day Medium (MED) : Between 10^2 and 10^3 transactions per day Large (LG) : Greater than 10^3 transactions per day
Processing (Computing)	
• Data Correction/Validation	Simple (S) : Logically simple edit checks and moderate volumes
• Text Handling	Complex (C) : Logically complex edit checks and/or high volumes
• Mathematical Calculation	Present (YES) : This function occurs
	Absent : This function does not occur (no symbol)
• Information Storage/Retrieval	Small (SM) : Low volume of mathematical operations
	Medium (MED) : Moderate volume
	Large (LG) : High volume
• File Management	Simple (S) : Logically simple access criteria (single key)
	Complex (C) : Logically complex access criteria (multiple key)
File Storage	Simple (S) : Logically simple criteria and moderate volumes
	Complex (C) : Logically complex criteria and/or large volumes
Data Transmission	Small (SM) : Less than 10^4 items
	Medium (MED) : Between 10^4 and 10^6 items
	Large (LG) : Greater than 10^6 items
Information Output/Display	Small (SM) : Low volume, low speed, intra-theatre
	Medium (MED) : Moderate volume and/or moderate speed, intra-theatre or extra-theatre
	Large (LG) : High volume and high speed, extra-theatre
	Simple (S) : Low volumes, simple formats
	Complex (C) : High volumes, elaborate formats, dynamic real-time response.

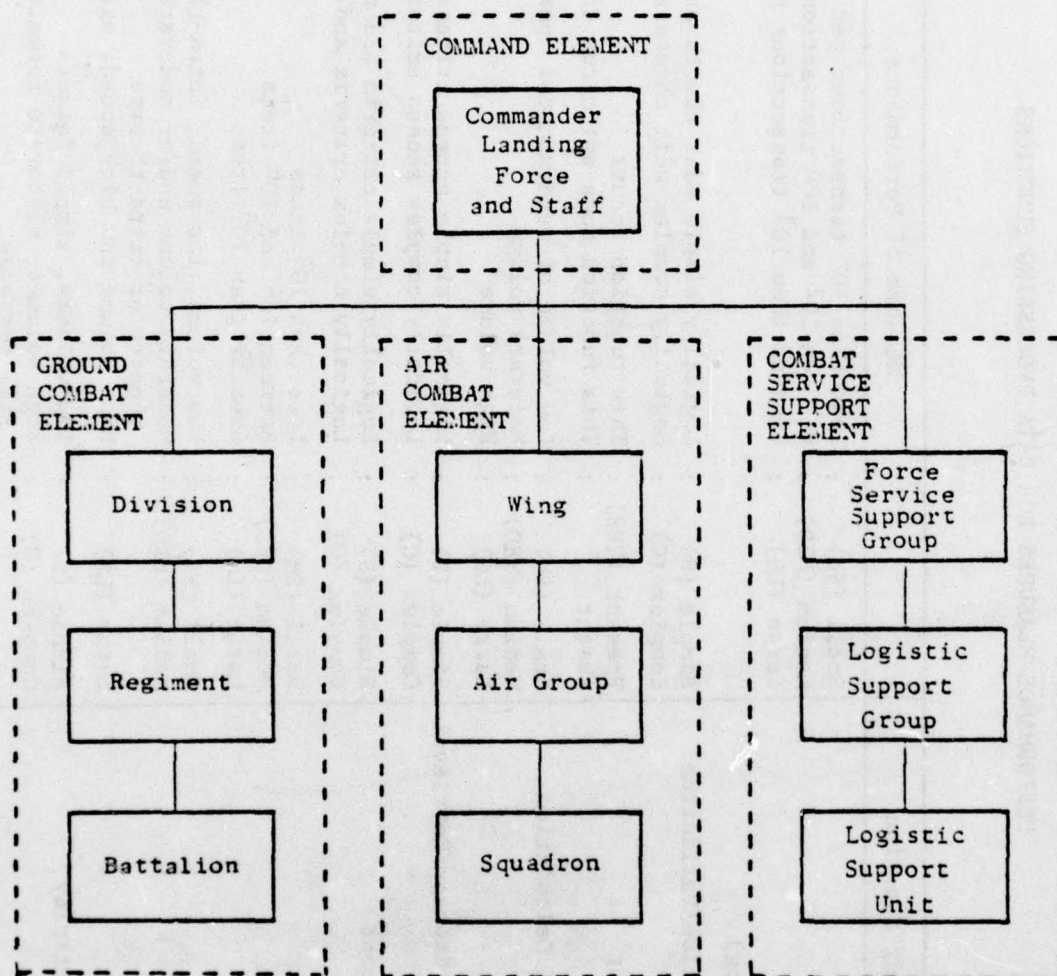


FIGURE 1 MAF ORGANIZATIONAL ELEMENTS

between environments. The separate focus on the individual operating environments ensures that alternative ADPS concepts subsequently recommended will reflect the full range of the operational needs of the FMF. In keeping with this approach, the two lower levels of FMF information-processing requirements are reported separately for each of the three environments in Sections II, III, and IV.

C. Study Approach

Several techniques and approaches have been used to determine the FMF information processing requirements. The various means used by SRI in determining requirements were the following:

- Analysis of the activities of the Force Automated Service Centers (FASC), Field Automated Service Centers (ASC), and other elements of the Force Information System (FIS) currently serving the FMF.
- Investigation of the usage and operations of current and developmental Class I ADS such as JUMPS/MMS, SASSY, MIMMS, and FREDs, as well as Class II and Class III ADS applications.¹⁻¹¹
- Evaluation of the findings of previous ADPS-related studies conducted for other military services or for the Marine Corps.¹²⁻²⁶
- Review of fundamental Marine Corps documents, such as the FMFM's, defining missions, doctrines, and plans.²⁸⁻³⁹
- Review of duties and tasks required to fulfill Military Occupational Specialties (MOS) requirements for Marine Corps personnel.⁴⁰
- Interviews with Marine Corps staff officers within the functional management offices at HQMC.
- Interviews with a broad range of different level FMF commanders and their staffs to determine their perceptions of present and future information-processing requirements.
- Analysis of the test experience from the Source Data Automation (SDA) tests conducted in the FMF.⁴¹⁻⁴⁴

The findings accumulated from this approach have been combined and interpreted by the SRI study team to produce the statements of requirements in this report.

It should be emphasized that the tasks identified by SRI in Sections II, III, and IV as being well suited to ADP were selected from information obtained through a many-faceted approach. No attempt has been made to prioritize information-related activities, or to accept or reject activities based on individual cost-effectiveness or operational concerns. The result, therefore, is a representative base of information on the types of activities being conducted at each echelon that could potentially benefit from automation in the opinion of either the SRI study team reviewing Marine Corps documents or the Marines who have been interviewed.

Every attempt has been made to gain the widest possible Marine Corps input in this process. During the course of the study, the SRI study team has visited the following agencies, offices, facilities, and locations for the purpose of gathering pertinent data:

- HQMC Divisions and Branches having responsibility for the management of the following resources or functional areas: manpower, intelligence, operations and training, logistics, finance, computer systems, and aviation.
- Marine Corps Bases: Camp Pendleton, Camp Lejeune, Twenty-Nine Palms.
- Marine Corps Air Stations: El Toro, Cherry Point.
- Supporting Establishment: MCDEC, MCTSSA, MCASC (Kansas City).
- FMF Units: I MAF, III MAF, 1st MarDiv, 2d MarDiv, FMFPac, FMFLant, II MAF, 1st FSSG.
- Navy Agencies: NELC, Naval Postgraduate School, MSDO.

In each case, an attempt was made to interview both ADP-oriented personnel and personnel without ADP backgrounds to develop a complete perspective.

II FMF REQUIREMENTS ASHORE

Tactical warfare in the combat ashore environment imposes increased workload and timeliness demands on FMF command and management activities. The increased workload is a reflection of the higher rates of data generation¹⁶, as well as of the need to operate 24 hours per day. Timeliness of information is increased because of the rapidity with which critical items of command and management information change under combat conditions, and the shortened time that commanders have to react to such changes. Information processing requirements ashore also differ significantly in degree from those afloat or in garrison because of the necessity to preserve high standards for reliability, maintainability, and security under harsh environmental conditions.

Combat ashore operating concepts require that the FMF ADPS components do not physically encumber the highly mobile MAGTF, and that they are easily used in the field. Information flow is operationally constrained by the locally available electronic communications channels or physical transportation means, and by the priorities established for their use.

A. Environment Overview

1. Organizational Factors

Marine Corps information processing responsibilities include tactical command and control applications, as well as command and management information system applications. The Marine Corps Tactical Command and Control System (MTACCS) requirements are under active study and development by responsible agencies of the Marine Corps, and MTACC system concepts are currently being designed and evaluated²⁶. To make maximum use of the total Marine Corps research and development effort, SRI's emphasis was directed toward identifying requirements for ADPS that differ from MTACC systems in timeframe or specific objective--always being cognizant, however, that they may be required to interface with MTACCS.

Such interface may take several forms: common ADPS philosophy, common equipment, and use of the same support personnel, among others. In some applications (notably in the manpower and logistics areas), in fact, the distinction between command and control versus command and management information systems becomes blurred.

A major task of the non-MTACCS command and management information system in the combat ashore environment is to aid in the general support of FMF resources by reporting resource usage and capability. Management activities that draw on FMF reported information include those involved in planning, accounting, inventorying, requisitioning, budgeting, and scheduling--activities that occur on a predictable and recurring basis.

It is inherent in this view that the FMF command and management information system also exists to serve directly the FMF commanders and their staffs at all levels, and via these offices upward to the MAGTF commander. The impetus to improve the information processing support ashore stems from the need to:

- Maintain resources at the highest achievable readiness condition.
- Integrate management information to minimize the number of forces required to conduct support functions.
- Provide the essential coupling between the deployed MAGTF, its parent organization, and the remainder of the Marine Corps Supporting Establishment.
- Integrate the mode of operation to minimize the transition shock involved when phasing into a combat ashore environment.

2. Operations and Activities

The employment concept for the FMF calls for amphibious operations and subsequent combat operations ashore. FMF units may be engaged in combat ashore during periods that range from a few hours to several months. The duration of the involvement generally dictates the size of the MAGTF--and, in turn the degree of information-processing support required. Combat ashore environments can be very fluid, and can often

involve a degree of land/water separation of units, as well as geographic separation of the combat service support (CSS) elements and aviation elements from the forward ground elements.

The implications of this environment dictate the desirability of several characteristics of an information processing system, including:

- An emphasis on subsystem autonomous operating capability or high availability interconnections and communications circuits.
- An emphasis on the mobility of ashore ADPS components so that they do not detract from the mobility of the using unit.
- An emphasis on means for integrating the operations of units afloat and ashore by exchange of information between the separated units.
- An emphasis on flexibility to expand the system size and span of support to satisfy the requirements imposed by varying intensities and durations of operations ashore.

3. Major Factors

A principal concern in the combat ashore environment is to maximize the number of personnel performing combat functions within the resource constraints of the MAGRF. It is essential, therefore, that the automation of information processing not carry with it an additional burden for units operating in the combat environment. Thus, the information processing environment ashore warrants the following considerations for ADPS applications:

- The ADPE and procedures used in the ashore environment should be the same as those used, and trained on, in the garrison to promote maximum effectiveness and efficiency.
- A major portion of the ADPS application should be directed toward those functions that will increase the availability of human and materiel resources--either by reducing the time to perform tasks or by increasing the management capability of the FMF commanders.
- The ADPS must be reliable and maintainable to the degree that it achieves a high degree of availability to perform its designated tasks.

Another major consideration for the use of an ADPS in the combat ashore environment is security of information. In its identification of task level requirements below, SRI has identified tasks that involve both classified and unclassified information. Additionally, the aggregation of manpower and logistics data in the combat ashore environment must be considered sensitive--even though it may not be classified in the strict sense.

The total security problem involves three areas. These areas are:

- Security in the flow of digital command and management information among the units of the FMF.
- Physical security of the ADPE and the data bases that reside with them.
- Susceptibility of ADPE to compromise due to the electromagnetic radiation that they emit, or to damage (or downtime) due to interference from other emitters within the FMF electronic equipment suite.

B. Requirements Statement

Requirements for information-processing activity ashore stem from command and management activities undertaken to:

- Provide timely information to meet reporting requirements of the Supporting Establishment.
- Provide timely and accurate information for direct monitoring and administration of ongoing operations at each administrative level of the FMF.

The results of SRI's investigation of these activities are reported in Part B below.

First, major areas of concern for, and the nature of, management functional requirements ashore are described. This description encompasses the combat ashore contribution to the second of SRI's three-level hierarchy of information-processing requirements. Following that, specific echelon-level tasks are identified as the day-to-day manifestation of those management responsibilities. Finally, ADS functional and performance requirements are further detailed and associated with each task.

1. Management Functional Requirements

The following paragraphs provide the focus of FMF requirements for command and management ashore as they relate to the six management functions identified in Section I.A. For each management function, requirements are distinguished as being associated with manpower, intelligence, operations, logistics, or financial responsibilities. The requirements primarily address the command and management responsibilities of the FMF unit commanders and their general/executive staffs, rather than the tactical control responsibilities of the MAGTF air control and fire control agencies. The following correlations can, therefore, be assumed:

- Manpower management functional requirements are largely derived from FMF commander and G-1/S-1 responsibilities (or special staff responsibilities under the cognizance of the G-1/S-1).
- Intelligence management functional requirements are largely derived from FMF commander and G-2/S-2 responsibilities (or special staff responsibilities under the cognizance of the G-2/S-2).
- Operations management functional requirements are largely derived from FMF commander and G-3/S-3 responsibilities (or special staff responsibilities under the cognizance of the G-3/S-3).
- Logistics management functional requirements are derived both from FMF commander and G-4/S-4 responsibilities (or special staff responsibilities under the cognizance of the G-4/S-4), and from responsibilities of FMF units that are task organized to provide logistics support (for example, the Supply and Maintenance Battalions, or the H&MS).
- Financial management functional requirements are derived from FMF commander and comptroller staff responsibilities.

a. Planning

Planning ashore is concerned with the future integration of men and materiel to support MAGTF combat operations. Such planning comprises the major components of the recurring staff estimates prepared for the MAGTF commanders. The purpose of the planning efforts is to

provide guidelines for sustained and continuous combat activity and support; hence, it involves frequent updates and revisions. Planning in the combat ashore environment involves elements of both near term and long range policy, depending on the echelon level at which it is conducted and its application.

- Manpower planning requirements suited to ADP include those recurring actions intended to bring efficiency and optimization to personnel accounting, individual and unit replacement, personnel resource allocation, and personnel welfare management.
- Intelligence planning requirements suited to ADP include those that aid recording of captured information and dissemination of combat intelligence, as well as those that aid the tactical application of sensors and other equipments.
- Operations planning requirements suited to ADP include those that speed the preparation, drafting, and dissemination of the Operations Plan, as well as those that facilitate rapid application of tactical units and equipment.
- Logistics planning requirements suited to ADP include those that apply planning factors for the development of logistics support plans and the activities of resupply or maintenance according to the rates of combat activity.
- Financial planning requirements suited to ADP include an assortment of tasks associated with preparing annual budgets.

b. Programming

Programming ashore requires the specific assignment of men and materiel to MAGTF combat operations, as well as the scheduling of such operations and support activities. Major products of the programming activity are the Operations Order (with its detailed annexes) and the Administrative/Logistics Order. The purpose of the programming effort is to provide specific instruction for sustained and continuous combat activity and support; hence, it is recurrent and cyclic according to the rate of the activity that it addresses.

- Manpower programming requirements suited to ADP include those that direct personnel assignment, allocation of replacements, preparing and issuing personnel orders, and scheduling personnel status changes.
- Intelligence programming requirements suited to ADP include preparation of intelligence collection orders and the intelligence annex to the Operations Order.
- Operations programming requirements suited to ADP include those associated with the preparation and update of the Operations Order, the assignment of specialized equipment or procedures, and the scheduling of daily operations.
- Logistics programming requirements suited to ADP include those that aid the preparation of the Administrative/Logistics Order, as well as those involved in scheduling maintenance and supply activity and work assignments.
- Financial programming requirements suited to ADP include an assortment of tasks associated with preparing guidance, instructions, and directives related to implementing command budgets.

c. Evaluating

Evaluating ashore requires the assessment of how effectively men and materiel resources are being used to support the tactical combat objectives. This is a necessary function that provides background for preparing various staff estimates and recommending alternative courses of action for the FMF unit commanders. The purpose of the evaluating effort is to identify the source of previous shortcomings, as well as to provide a structured basis to support forecasting functions for future operations.

- Manpower evaluating requirements suited to ADP include those that aid the determination of unit strengths, personnel assignment and replacement requirements, and priorities for the distribution of personnel resources.
- Intelligence evaluating requirements suited to ADP include those that aid the assessment of enemy activity, target priorities, and enemy tactics, as well as those that assess FMF capability to accomplish desired objectives against the enemy.

- Operations evaluating requirements suited to ADP include those that aid the assessment of schedules, mobility, and resources to conduct operations and support the combat units.
- Logistics evaluating requirements suited to ADP are those that aid in the analysis of the supply distribution performance, maintenance throughput, inventory levels, and personnel skills availability.
- Financial evaluating requirements suited to ADP include assessing budgets, performing cost analyses, and reviewing resource requirements and justifications.

d. Monitoring/Inventorying

Monitoring/inventorying ashore requires the maintenance of records concerning the status of FMF manpower and materiel resources, as well as the activities and services that these resources are providing to the combat operations. Two purposes are served by the monitoring/inventorying activity that takes place ashore. The first is to maintain up-to-date status information locally for direct support of operations, and the second is to report status information externally to higher authorities for general support of combat capability. This function takes place continuously, and it is aggregated and reported on a time period that varies according to the application that is being addressed.

- Manpower monitoring requirements suited to ADP include those that aid the capture and entry of personnel-related events primarily through the unit diary. External reporting is directed heavily toward JUMPS/MMS input.
- Intelligence monitoring requirements suited to ADP includes updating target information, contact reports, and intelligence summaries.
- Operations monitoring requirements suited to ADP include those that aid in overviewing the progress of combat operations, overseeing unit readiness (reporting to FORSTAT), and compiling command historical records and journals.
- Logistics monitoring requirements suited to ADP include those concerned with overseeing the status, location, and condition of combat-essential materiel, maintenance activity, supply

requisitions, and medical records. Systematic reporting is directed heavily toward SASSY, MIMMS, 3M, and SUADPS-EU.

- Financial monitoring requirements suited to ADP include tasks associated with maintaining pay records, preparing travel vouchers, preparing periodic financial reports, recording obligations and expenditures, and maintaining property account records.

e. Forecasting

Forecasting ashore requires the estimate of future operational requirements for men, materiel, information, firepower, and mobility, as well as estimates of future enemy operational activities and capability. The purpose of this effort is to anticipate and correct resource shortages before they occur and to adjust resources in short supply to derive the maximum effectiveness from their application to the combat environment at any given time. This is a continuous process in the ashore environment.

- Manpower forecasting requirements to ADP include those related to estimating expected casualties and replacement requirements, estimating the expected POW requirements, and estimating the requirements for civilian employees.
- Intelligence forecasting requirements suited to ADP include those related to estimating enemy resources and capabilities, as well as any defensive vulnerabilities.
- Operations forecasting requirements suited to ADP include those that generate FMF estimates of alternative courses of action based on firepower, mobility, and support considerations.
- Logistics forecasting requirements suited to ADP include those that assist estimating supply and ammunition usage rates, the responsiveness of the supply chain, and the anticipated availability of equipments and weapons systems.

f. Supervising/Controlling

Supervising/controlling ashore requires the continuous direction and redirection of men and materiel to complete combat operations

and support activities. The primary purpose is to relate the progress of scheduled missions to expected performance norms, and to apply corrective actions when deficiencies are noted or forecast. A complementary purpose is to assure that priority items are given due attention and access to resources that may have been previously assigned to lesser priority items. Supervising/controlling in the combat ashore environment is a near real-time activity.

- Manpower supervising requirements suited to ADP include the administrative tracking of personnel status, and the dissemination of pertinent personnel data.
- Intelligence supervising requirements suited to ADP include controlling the collection of information, its interpretation as combat intelligence, and its dissemination to appropriate agencies.
- Operations supervising requirements suited to ADP include those associated with coordinating the activities and responsibilities of various FMF units for firepower, mobility, reinforcements, and support service.
- Logistics supervising requirements suited to ADP include those associated with efficiently handling maintenance workloads, supply requisitions, and transportation requests.
- Financial supervising requirements suited to ADP include directing activities of the disbursing office, overseeing execution of the budget, and supervising timekeeping operations.

2. ADS Functional and Performance Requirements

The management functional requirements are further detailed and expanded in the statement of ADS functional and performance requirements reported in the matrix format of Tables 3 through 8. Definitions of the various table categories and performance measures are found in Section I. In addition, the echelon activity tasks have been grouped for association purposes into the following functional domains: manpower (MP), intelligence (I), operations and training (OT), logistics (L), and finance (F).

Table 3
ASHORE PLANNING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Update personnel staff estimates			YES		S		SM		S
	MP.2 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S
	MP.3 Plan personnel transfers, classifications, promotions	SM			SM	C	S	MED		S
	MP.4 Plan administration & welfare of POW's			YES		S	S	SM		S
	MP.5 Plan for collection, identification, evacuation of deceased			YES		S		SM		S
	MP.6 Plan procurement & administration of civilian employees	SM		YES		C	S	SM		S
	MP.7 Draft SOP's for the command			YES		S		SM		S
Wing	OT.1 Update operations staff estimates			YES		S		SM		S
	OT.2 Update ground concept of operations			YES		S		SM		S
	OT.3 Develop & update operational contingency plans	SM		YES	MED	S		MED		C
	OT.4 Plan future force maneuvers	SM		YES	MED	S		MED		C
	OT.5 Plan management of ground communications	SM				S	C	SM		S
	L.1 Update logistics staff estimates			YES		C		MED		S
	L.2 Plan tactical motor transport employment	SM				C	S	SM		S
	L.3 Plan combat engineer operations	SM			SM	S		SM		S
	L.4 Plan material handling equipment distribution	SM				S		SM		S
	L.5 Plan resupply requisitions	MED			MED	C	C	MED		S
	F.1 Prepare annual budgets	SM		YES	MED	S	S	MED		S
	F.2 Plan allocation of funds	SM			MED	S	S	SM		S
	MP.1 Update personnel staff estimates			YES		S		SM		S
	MP.2 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S
	MP.3 Plan personnel transfers, classifications, promotions	SM			SM	C	S	MED		S
	MP.4 Plan for collection, identification, evacuation of deceased			YES		S		SM		S
	MP.5 Plan procurement & administration of civilian employees	SM		YES		C	S	SM		S
	MP.6 Draft SOP's for the command			YES		S		SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S
	OT.2 Update air concept of operations ashore			YES	SM	S		SM		S
	OT.3 Plan tactical employment of air and surface AAW	MED			MED	S	S	SM		C
	OT.4 Plan management of aviation communications	SM				S	C	SM		S

Table 3

ASHORE PLANNING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (Cont.)	L.1 Update logistics staff estimates			YES		S		SM		S
	L.2 Plan combat engineer operations	SM			SM	S		SM		S
	L.3 Plan air cargo transport requirements	SM				S		SM		S
	L.4 Plan air fuel transport requirements	SM				S		SM		S
	L.5 Plan material handling equipment distribution	SM				S		SM		S
	L.6 Plan resupply requisitions	MED			MED	C	C	MED		S
FSSC	F.1 Prepare annual budgets	SM		YES	MED	S	S	MED		S
	F.2 Plan allocation of funds	SM			MED	S	S	SM		S
	MP.1 Update personnel staff estimates			YES		S		SM		S
	MP.2 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S
	MP.3 Plan personnel transfers, classifications, promotions	SM			SM	C	S	MED		S
	MP.4 Plan personnel services (postal, religious, medical)			YES		S		SM		S
	MP.5 Plan administration & welfare of POW's			YES		S	S	SM		S
	MP.6 Plan for collection, identification, evacuation of deceased									
	MP.7 Plan graves registration					S		SM		S
	MP.8 Plan procurement & administration of civilian employees	SM		YES		S		SM		S
	MP.9 Draft SOP's for the command			YES		C	S	SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S
	OT.2 Update CSS concept of operations			YES		S		SM		S
	L.1 Update logistics staff estimates			YES		S		SM		S
	L.2 Plan supply issuing & warehousing SOP's	SM		YES	SM	C	S	MED		S
	L.3 Plan maintenance shop activities	SM		YES	SM	C	S	MED		S
	L.4 Plan transportation employment & allocation	SM			SM	S	S	SM		S
	L.5 Plan fuel procurement & distribution	SM			SM	S	S	SM		S
	L.6 Plan medical/dental support			YES		S		SM		S
	F.1 Prepare annual budgets	SM		YES	MED	S	S	MED		S
	F.2 Plan allocation of funds	SM			MED	S	S	SM		S
	F.3 Plan disbursing procedures & activities	MED			MED	S	S	MED		S

Table 3

ASHORE PLANNING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Manage-ment	File Storage	Data Trans-mission	Information Output/Display
Regiment	MP.1 Update personnel staff estimates			YES		S		SM		S
	MP.2 Draft SOP's for the command			YES		S		SM		S
	1.1 Prepare intelligence staff estimates			YES		S		SM		S
	1.2 Designate EEI's in a file	SM				S		SM		S
	1.3 Prepare requests for information	SM		YES		S	S	SM		S
	1.4 Plan remote ground sensor emplacement	SM		YES		S		SM		S
	1.5 Plan information collection efforts			YES		S		SM		S
	1.6 Plan counterintelligence actions			YES		S		SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S
	OT.2 Develop concept of operations recommendations			YES		S		SM		S
	OT.3 Develop force maneuver recommendations	SM				S	S	SM		S
	OT.4 Develop plan of supporting fires recommendations	SM		YES	SM	S	S	SM		S
	OT.5 Formulate plans of action			YES		S		SM		S
	L.1 Update logistics staff estimates			YES		S		SM		S
	L.2 Coordinate supply, maintenance, transportation activity	SM		YES	SM	S	S	MED		S
Air Group	MP.1 Update personnel staff estimates			YES		S		SM		S
	MP.2 Draft SOP's for the command			YES		S		SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S
	OT.2 Plan implementation of air defense concept	SM		YES	MED	S	S	SM		S
	OT.3 Plan implementation of offensive air support concept	SM		YES	MED	S	S	SM		S
	L.1 Update logistics staff estimate			YES		S		SM		S
	L.2 Plan supply issuing & warehousing SOP's	SM		YES		S	S	MED		S
	L.3 Plan maintenance shop activities			YES		S		SM		S
	L.4 Plan supply & ordnance requisitions	MED			MED	C	C	MED		S
	L.5 Plan use & maintenance of test equipment	SM				S	S	SM		S
	L.6 Plan aircraft maintenance schedules	SM		YES	SM	S	S	MED		S
	L.7 Plan postal & disbursing support of squadrons			YES		S		SM		S
	MP.1 Update personnel staff estimates			YES		S		SM		S
	MP.2 Plan personnel services (postal, religious, medical)			YES		S		SM		S
	LSC									

Table 3

ASHORE PLANNING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
LSG (Cont.)	MP.3 Plan administration & welfare of POW's				SM	S	S	SM		S
	MP.4 Plan for collection, identification, evacuation of deceased					S		SM		S
	MP.5 Plan procurement & administration of civilian employees	SM		YES		C	S	SM		S
	MP.6 Draft SOP's for the command			YES		S		SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S
	L.1 Update logistics staff estimates			YES		S		SM		S
Battalion	L.2 Plan supply activities	SM			SM	C	S	MED		S
	L.3 Plan maintenance activities	SM			SM	C	S	MED		S
	L.4 Plan transportation activities	SM				S		SM		S
	L.5 Plan medical/dental activities	SM				S		SM		S
	MP.1 Update personnel staff estimates			YES		S		SM		S
	I.1 Prepare intelligence staff estimates			YES		S		SM		S
	I.2 Prepare requests for information	SM		YES		S		SM		S
	I.3 Plan information collection efforts			YES		S		SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S
	OT.2 Develop concept of operations recommendations			YES		S		SM		S
Squadron	L.1 Update logistics staff estimates			YES		S		SM		S
	L.2 Plan supply, maintenance, transportation requirements	MED		YES	SM	S	S	MED		S
	MP.1 Update personnel staff estimates			YES		S		SM		S
	I.1 Prepare intelligence staff estimates			YES		S		SM		S
	I.2 Prepare requests for information			YES		S		SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S
LSU	L.1 Update logistics staff estimates			YES		S		SM		S
	L.2 Plan supply, maintenance, transportation requirements	MED		YES	SM	S	S	MED		S
	MP.1 Update personnel staff estimates			YES		S		SM		S
	OT.1 Update operations staff estimates			YES		S		SM		S

Table 3
ASHORE PLANNING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
LSU (Cont.)	L.1 Update logistics staff estimates	SM		YES		S		SM		S
	L.2 Plan supply activities	SM			SM	C	S	MED		S
	L.3 Plan maintenance activities	SM			SM	C	S	MED		S
	L.4 Plan transportation activities	SM				S		SM		S

Table 4

ASHORE PROGRAMMING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Trans-mission	Information Output/Display
Division	MP.1 Revise the Admin/Log Plan personnel annex			YES		S		SM		S
	MP.2 Recommend allocation of replacements	SM			SM	S	S	MED		S
	MP.3 Schedule personnel status changes	SM		YES		S	S	MED		S
	MP.4 Program POW activities					S		SM		S
	MP.5 Program civilian employees activities	SM		YES		S		SM		S
	OT.1 Revise the Ops Plan			YES		S		SM		S
Wing	OT.2 Revise the Ops Plan concept of operations annex			YES		S		SM		S
	OT.3 Revise the Ops Plan fire support coordination plan			YES		S		SM		S
	OT.4 Revise input to the naval gunfire annex			YES		S		SM		S
	OT.5 Revise the Ops Plan communication-electronics annex			YES		C		SM		S
	OT.6 Revise the Ops Plan antimechanized annex			YES		S		SM		S
	L.1 Prepare motor transport vehicle assignment table				SM	S	S	SM		S
	L.2 Program maintenance activity	SM				S	S	SM		S
	L.3 Program distribution of supplies	SM				S	S	SM		S
	F.1 Prepare instruction & guidance for budget matters			YES		S		SM		S
	MP.1 Revise the Admin/Log plan personnel annex			YES		S		SM		S
	MP.2 Recommend allocation of replacements	SM			SM	S	S	MED		S
	MP.3 Schedule personnel status changes	SM		YES	SM	S	S	MED		S
MP.4 Program civilian employees activities	SM		YES		S	S	SM		S	
OT.1 Revise the Ops Plan air operations annex	SM		YES			S		SM		S
OT.2 Revise the Ops Plan air support annex	SM		YES		MED	S	S	MED		S
OT.3 Revise the Ops Plan AAW annex	SM		YES		MED	S	S	MED		S
OT.4 Prepare the aviation basing plan			YES			S		SM		S
OT.5 Schedule air missions	SM				MED	S		MED		S
	L.1 Prepare air transport plans	SM		YES		S	S	MED		S
	L.2 Prepare the air transport schedule	SM		YES		S		SM		S
	L.3 Revise aviation input to Admin/Log plan			YES		S		SM		S
	L.4 Program maintenance activity					S	S	SM		S
	L.5 Program distribution of supplies	MED				S	S	SM		S
	L.6 Program motor transport employment	MED				S	S	SM		S

Table 4

ASHORE PROGRAMMING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (Cont.) FSSG	F.1 Prepare instructions & guidance for budget matters			YES		S		SM		S
	MP.1 Revise the Admin/Log Plan personnel annex			YES		S		SM		S
	MP.2 Recommend allocation of replacements	SM			SM	S	S	MED		S
	MP.3 Schedule personnel status changes	SM		YES	SM	S	S	MED		S
	MP.4 Program civilian employees activities	SM		YES		S	S	SM		S
	OT.1 Revise CSS input to Ops Plan			YES		S		SM		S
	L.1 Revise the Admin/Log Plan	MED		YES		S	S	MED		S
	L.2 Prepare the transport support schedule	SM		YES		S		SM		S
	L.3 Prepare the transport loading schedule	SM		YES		S		SM		S
	L.4 Maintain current logistics support concept plans	SM		YES		S		MED		S
Regiment	L.5 Program maintenance support schedules	SM		YES	MED	S		SM		S
	L.6 Program supply distribution schedules	SM		YES	MED	S		SM		S
	F.1 Prepare instructions & guidance for budget matters			YES		S		SM		S
	MP.1 Prepare input to the personnel annex			YES		S		SM		S
	I.1 Coordinate battalion intelligence plans	MED			SM	C	C	MED		S
	I.2 Schedule combat intelligence collection activities			YES		S		SM		S
	I.3 Issue orders for information collection			YES		S		SM		S
	I.4 Fill out intelligence collection worksheets			YES		S		SM		S
	I.5 Schedule counterintelligence activities			YES		S		SM		S
	I.6 Prepare and revise intelligence section SOP			YES		S		SM		S
Air Group	OT.1 Prepare input to the Ops Plan			YES		S		SM		S
	OT.2 Prepare input to Ops Plan annexes			YES		S		SM		S
	L.1 Prepare transportation recommendations	SM				S	S	SM		S
	L.2 Prepare motor transport assignments & schedules	SM				S	S	SM		S
	L.3 Prepare input to the Admin/Log Plan			YES		S		SM		S
	MP.1 Prepare input to the personnel annex			YES		S		SM		S
	I.1 Prepare input to Ops Plan intelligence annex			YES		C		SM		S
	I.2 Schedule combat intelligence collection missions			YES		S		SM		S

Table 4

ASHORE PROGRAMMING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Trans-mission	Information Output/Display
Air Group (Cont.)	I.3 Issue orders for information collection			YES		S		SM		S
	I.4 Fill out intelligence collection worksheets			YES		S		SM		S
	I.5 Prepare and revise intelligence section SOP			YES		S		SM		S
	OT.1 Coordinate helicopter employment with ground operations	SM				S	S	MED		S
	OT.2 Update aviation availability table	SM		YES	SM	S	S	MED		S
LSG	OT.3 Prepare air assets allocation/schedule	SM		YES	SM	S	S	MED		S
	OT.4 Prepare aviation unit operation plan			YES		S		SM		S
	OT.5 Prepare air support annex to the Ops Plan			YES		S		SM		S
	L.1 Coordinate aviation logistics support	SM			SM	S	S	MED		S
	L.2 Program aviation maintenance activity	SM		YES		S		SM		S
	MP.1 Prepare input to the personnel annex			YES		S		SM		S
	OT.1 Prepare input to the Ops Plan			YES		S		SM		S
	L.1 Prepare input to the Admin/Log plan			YES		S		SM		S
	L.2 Prepare base support plans			YES	SM	S		SM		S
	L.3 Prepare the transport support schedule	SM		YES		S		SM		S
Battalion	L.4 Prepare the transport loading schedule	SM		YES		S		SM		S
	L.5 Program maintenance support schedules	SM		YES	SM	S		SM		S
	L.6 Program supply distribution schedules	SM		YES	SM	S		SM		S
	MP.1 Prepare input to the personnel annex			YES		S		SM		S
	I.1 Schedule intelligence gathering activities	SM		YES		S	S	SM		S
	I.2 Issue orders for information collection			YES		S		SM		S
	I.3 Fill out intelligence collection worksheets			YES		S		SM		S
	OT.1 Prepare input to Ops Plan			YES		S		SM		S
	OT.2 Revise detailed concept of operations			YES		S		SM		S
	OT.3 Prepare plans for inclusion in Ops Plan annexes			YES		S		SM		S
	OT.3 Prepare elements of deployment diagram	SM		YES		S		SM		S
	OT.5 Prepare input to force maneuver schedules	SM		YES		S		SM		S
	OT.6 Coordinate air assets employment schedule	SM		YES		S	S	SM		S

Table 4

ASHORE PROGRAMMING REQUIREMENTS (Concluded)

		Required Data Processing Functions								
Echelon	Representative Activity	Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Battalion (Cont.) Squadron	OT.7 Prepare detailed plan of supporting fires	SM		YES		S	S	SM		S
	L.1 Prepare Admin/Log Plan recommendations			YES		S		SM		S
	MP.1 Prepare input to the personnel annex			YES		S		SM		S
	I.1 Schedule aerial reconnaissance missions	SM		YES		S		SM		S
	I.2 Issue orders for information collection			YES		S		SM		S
	I.3 Fill out intelligence collection worksheets			YES		S		SM		S
LSU	OT.1 Prepare aviation employment table	SM		YES	SM	S	S	SM		S
	OT.2 Schedule aviation unit missions	SM		YES	SM	S	S	SM		S
	OT.3 Schedule aircrews to fulfill air missions	SM			SM	S	S	SM		S
	MP.1 Prepare input to the personnel annex			YES		S		SM		S
	OT.1 Prepare input to the Ops Plan			YES		S		SM		S
	L.1 Prepare input to the Admin/Log Plan			YES		S		SM		S
	L.2 Program CSS support functions	MED		YES		S	S	MED		S

Table 5

ASHORE EVALUATING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Trans-mission	Information Output/Display
Division	MP.1 Determine replacement requirements	SM			SM	S	S	MED		S
	MP.2 Determine personnel management requirements					S	S	MED		S
	MP.3 Compile and analyze statistical manpower reports	SM			SM	S		MED		S
	OT.1 Evaluate the changing tactical situation	SM				S	S	SM		S
	OT.2 Determine priority for resources in short supply	SM					S	MED		S
	OT.3 Determine priority for replacements	SM				S	S	SM		S
	OT.4 Determine ground fire support requirements	SM			MED	S	S	SM		S
	OT.5 Conduct cost/effectiveness and statistical analyses	SM			MED			MED		S
	L.1 Evaluate logistics support	SM			MED			MED		S
	F.1 Evaluate budgets for the command	SM			SM	S	S	SM		S
	F.2 Develop cost analyses & statistical data	SM					S	MED		C
	F.3 Review resource requirements and justifications				SM	S	S	SM		S
	MP.1 Determine replacement requirements	SM			SM	S	S	MED		S
	MP.2 Determine personnel management requirements					S	S	MED		S
	MP.3 Compile and analyze statistical manpower reports	SM			SM	S	S	MED		S
Wing	OT.1 Evaluate the changing tactical situation	SM				S	S	SM		S
	OT.2 Determine priority for resources in short supply	SM			MED			MED		S
	OT.3 Determine priority for replacements	SM				S	S	SM		S
	OT.4 Determine air fire support requirements	SM			MED	S	S	SM		S
	OT.5 Conduct cost/effectiveness and statistical analyses	SM			MED			MED		S
	L.1 Evaluate logistics support	SM			MED			MED		S
	F.1 Evaluate budgets for the command	SM			SM	S	S	SM		S
	F.2 Develop cost analyses & statistical data	SM					S	MED		C
	F.3 Review resource requirements and justifications				SM	S	S	SM		S
	MP.1 Determine replacement requirements	SM			SM	S	S	MED		S
	MP.2 Determine personnel management requirements					S	S	MED		S
	MP.3 Compile and analyze statistical manpower reports	SM			SM	S	S	MED		S
	OT.1 Evaluate the adequacy of support unit operations	SM			SM			MED		S
	OT.2 Evaluate the availability of operational resources	SM			MED			MED		S
	FSSG					MED			MED	
MP.1 Determine replacement requirements		SM			SM	S	S	MED		S
MP.2 Determine personnel management requirements						S	S	MED		C
MP.3 Compile and analyze statistical manpower reports		SM			SM	S	S	SM		S
OT.1 Evaluate the adequacy of support unit operations		SM			SM			MED		S
OT.2 Evaluate the availability of operational resources		SM			MED			MED		S
					MED			MED		S
					SM	S	S	SM		S
					SM			MED		S
					SM	S	S	MED		S
					SM	S	S	MED		S
					SM	S	S	MED		S
					SM	S	S	MED		S
					SM	S	S	MED		S
					SM	S	S	MED		S

Table 3

ASHORE EVALUATING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
FSSG (Cont.)	L.1 Evaluate the CSS organization & means	SM			MED			MED		S
	L.2 Evaluate maintenance & supply distribution	SM			MED			MED		S
	F.1 Evaluate budgets for the command	SM			SM	S	S	SM		S
	F.2 Develop cost analyses & statistical data	SM				S	S	MED		C
	F.3 Review resource requirements and justifications				SM	S	S	SM		S
Regiment	I.1 Analyze trends regarding enemy activity related to location, time, weather	SM			SM	C	S	MED		S
	I.2 Evaluate results of operational procedures through historical retention of data	SM			SM	C	S	MED		S
	I.3 Evaluate ground sensor activity, and reliability records	SM			SM	S		SM		S
Air Group	I.1 Analyze trends regarding enemy activity related to location, time, weather	SM			SM	C	S	MED		S
	I.2 Evaluate results of operational procedures through historical retention of data	SM			SM	C	S	MED		S
	I.3 Evaluate ground sensor activity, and reliability records	SM			SM	S		SM		S
LSG	L.1 Analyze the maintenance management program	SM				S	S	MED		S
	L.2 Audit stock levels	SM			SM	S	S	MED		S
	L.3 Analyze supply data	SM			SM	S	S	MED		S
	L.4 Audit supply accounts	SM			SM	S	S	MED		S
	L.5 Evaluate warehouse operations	SM				S	S	SM		S
	L.6 Identify maintenance activity trends	SM			MED			MED		S
Battalion	L.1 Analyze the maintenance management program	SM				S	S	MED		S
	L.2 Audit stock levels	SM			SM	S	S	MED		S
	L.3 Analyze supply data	SM			SM	S	S	MED		S
	L.4 Audit supply accounts	SM			SM	S	S	MED		S
	L.5 Evaluate warehouse operations	SM				S	S	SM		S
	L.6 Identify maintenance activity trends	SM			MED			MED		S
	I.1 Analyze trends regarding enemy activity related to location, time, weather	SM			SM	C	S	MED		S
	I.2 Evaluate results of operational procedures through historical retention of data	SM			SM	C	S	MED		S

Table 5

ASHORE EVALUATING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/ Validation	Text Hand- ling	Mathematical Calculation	Information Storage/ Retrieval	File Manage- ment	File Storage	Data Trans- mission	Information Output/ Display
Battalion (Cont.) Squadron LSU	1.3 Evaluate ground sensor activity, and reliability records (No significant requirements identified) (No significant requirements identified)	SM			SM	S		SM		S

Table 6

ASHORE MONITORING/INVENTORYING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Maintain a current master personnel file	MED	S		SM	S	C	LG		C
	MP.2 Compile daily strength of command information					S		MED		C
	MP.3 Produce personnel-related rosters					S	S	MED		S
	MP.4 Produce periodic personnel status reports					S		MED		S
	MP.5 Monitor unit diary transactions for JUMPS/MMS	MED	C			C	C	MED	LG	C
	MP.6 Monitor T/O's for THR	SM	C			S		MED	MED	S
	MP.7 Monitor POW status/activity	SM				S	S	SM		S
	MP.8 Monitor civilian employee status/activity	SM				S	S	SM		S
	MP.9 Monitor graves registration & disposition of personal effects	SM				S	S	SM	SM	S
	OT.1 Maintain a force maneuver/action file									
	OT.2 Monitor the status and build-up of assets ashore	MED			SM	S		SM	SM	S
	OT.3 Prepare operational and historical reports	MED		YES	SM	S		MED	SM	S
	OT.4 Document the command chronology	MED		YES		S		MED		S
	OT.5 Monitor unit status for FORSTAI	SM	C			C	C	MED	MED	S
	OT.6 Monitor operations boundaries (FSCL, NFL, FEBA)	SM			MED	C		MED		C
	OT.7 Monitor activity along lines of communication	SM				S		SM		S
	L.1 Compile and maintain statistical logistics data	MED	S		MED	S	S	LG		C
	L.2 Monitor supply and parts requisitions	MED	S			S	S	MED		S
	L.3 Monitor daily maintenance activity	MED	S			S	S	MED		S
	L.4 Monitor supply management for SASSY	MED	C			C	C	MED	LG	C
	L.5 Monitor maintenance management for MIMMS	MED	C			C	C	MED	LG	C
	L.6 Monitor controlled items for MIMMS	SM	C			C		MED	MED	S
	L.7 Report sick, injured, wounded	MED	S			S	S	MED	SM	S
	L.8 Monitor status/location of logistics build-up ashore	SM				S	S	MED	SM	S
	F.1 Prepares, maintains, and audits pay records	MED	S			SM	S	MED		S
	F.2 Prepares travel expense vouchers			YES		S	S	SM		S
	F.3 Prepares periodic and interim financial reports					S	S	SM		S
	F.4 Maintains records of obligations and expenditures	SM				MED	S	SM		S
	F.5 Maintains property account records	SM					S	SM		S
	F.6 Monitors financial reporting to MACFARS	SM	C				S			S

Table 6

ASHORE MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing	MP.1 Maintain a current master personnel file	MED	S					LG		C
	MP.2 Compile daily strength of command information				SM	S	C	MED		C
	MP.3 Produce personnel-related rosters					S	S	NED		S
	MP.4 Produce periodic personnel status reports					S		MED		S
	MP.5 Monitor unit diary transactions for JUMPS/MMS	MED	C			C	C	LG	LG	C
	MP.6 Monitor T/O's for TMR	SM	C			S		MED	MED	S
	MP.7 Monitor civilian employee status/activity	SM				S	S	SM		S
	OT.1 Monitor the location/activity of aviation assets	SM		YES		S		MED		S
	OT.2 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.3 Monitor aircraft alert status	SM				C		MED		S
	OT.4 Monitor daily flights and aircraft availability	SM			MED	S	S	SM		S
	OT.5 Monitor aircraft maintenance status	SM				S		SM		S
	OT.6 Monitor post-flight reports	SM				S	S	SM		S
	OT.7 Monitor aircraft statistical data for FREDs	MED	C			S	S	MED	MED	S
	OT.8 Document the command chronology	MED				S		MED		S
	OT.10 Monitor basing status					S		SM		S
	OT.11 Monitor air defense posture	SM				MED	S	S	MED	C
	OT.12 Monitor aviation operating boundaries	SM				MED	S	S	MED	C
	L.1 Compile and maintain statistical logistics data	LG	S			C	C	LG		C
	L.2 Monitor logistic aircraft status	SM	S			S	S	SM		S
	L.3 Monitor Aviation Supply for SUADPS-EU	MED	C			C	C	LG		C
	L.4 Monitor daily aircraft maintenance activity	MED				S		SM		S
	L.5 Monitor aviation maintenance, material, usage for 3M	MED	C			C	C	LG	LG	C
	L.6 Monitor supply/fiscal management	SM				S	S	SM		S
	L.7 Monitor supply management for SASSY	MED	C			C	C	MED	MED	C
	L.8 Monitor maintenance management for MUMMS	MED	C			C	C	MED	MED	C
	L.9 Monitor material management for MUMMS	SM	C			C	C	SM	MED	S
	L.10 Report sick, wounded, insured	MED	S			S	S	MED	SM	S
	L.11 Monitor the location of aviation logistics resources	SM	S			S		MED		S
F.1 Prepare, maintain, and audit pay records	MED	S		SM	S	S	MED		S	

Table 6

ASHORE MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (Cont.)	F.2 Prepare travel expense vouchers			YES		S		SM		S
	F.3 Prepare periodic and interim financial reports	SM			MED	S	S	SM		S
	F.4 Maintain records of obligations and expenditures	SM				S		SM		S
	F.5 Maintain property account records	SM	C			S		SM		S
	F.6 Monitor financial reporting to MAGFARS	SM				S	S	MED		S
	NP.1 Maintain a current master personnel file	MED	S			S	C	LG		C
FSSG	NP.2 Compile daily strength of command information				SM	S		MED		C
	NP.3 Produce personnel-related rosters					S	S	MED		S
	NP.4 Produce periodic personnel status reports					S		MED		S
	NP.5 Monitor unit diary transactions for JUMPS/MMS	MED	C			C	C	MED	LG	C
	NP.6 Monitor T/O's for THR	SM	C			S		MED	MED	S
	NP.7 Monitor POW status/activity	SM				S	S	SM		S
	NP.8 Monitor civilian employee status/activity	SM				S	S	SM		S
	NP.9 Monitor graves registration & disposition of personal effects	SM				S	S	SM	SM	S
	OT.1 Monitor the build-up/location of logistics resources	MED		YES	SM	S		MED	SM	S
	OT.2 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.3 Document the command chronology	MED		YES		S		MED		S
	OT.4 Monitor unit status for FORSTAT	SM	C			C	C	MED	MED	S
	L.1 Compile and maintain statistical logistics data	MED	S		MED	C	C	LG		C
	L.2 Produce daily logistics summaries				SM	S		MED		S
	L.3 Monitor repair parts levels for critical items				SM	S	S	SM		S
	L.4 Provide centralized ADS for supply (SASSY)	MED	C		MED	C	C	LG	LG	C
	L.5 Provide centralized ADS for maintenance (MIMMS)	MED	C		MED	C	C	LG	LG	C
	L.6 Monitor the status of logistics dumps	SM			SM	S		SM		S
	L.7 Maintain medical-related records	MED	S			S	S	MED		S
F.1 Prepare, maintain, and audit pay records	MED	S		SM	S	S	MED		S	
F.2 Prepare travel expense vouchers			YES		S		SM		S	
F.3 Prepare periodic and interim financial reports				MED	S	S	SM		S	
F.4 Maintain records of obligations and expenditures	SM				S		SM		S	

Table 6

ASHORE MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions									
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Trans-mission	Information Output/Display	
FSSG (Cont.)	F.5 Maintain property account records	SM				S		SM		S	
	F.6 Monitor financial reporting to MAGFARS	SM	C			S	S	MED		S	
	MP.1 Maintain a current unit diary for JUMPS/WMS input	SM	S			S	S	MED	MED	S	
Regiment	MP.2 Produce personnel-related rosters					S	S	MED		S	
	MP.3 Produce periodic personnel-status reports					S		MED		S	
	I.1 Prepare periodic intelligence reports & summaries			YES		S		SM		S	
	I.2 Produce target bulletins	SM				S	S	SM		S	
	I.3 Format messages for INTSUM and INTREP reporting			YES		S		SM		S	
	I.4 Log receipt and classify content of incoming intelligence messages			YES		S		MED		S	
	I.5 Monitor enemy activity and traffic patterns	SM				C	S	SM		S	
	I.6 Monitor contact reports in area of operations	SM				S		SM		S	
	I.7 Monitor remote ground sensor activity	SM				S		SM		S	
	I.8 Inventory sensors					S		SM		S	
	I.9 Maintain a current target information file	SM		YES		C	S	MED		S	
	OT.1 Produce operational and historical reports	MED		YES	SM	S	S	MED		S	
	OT.2 Monitor unit status for FORSTAT	SM	S			S	S	SM	SM	S	
	Air Group	L.1 Monitor logistics transactions					S	S	MED		S
		L.2 Monitor supply management for SASSY	MED	S			S	S	MED	SM	S
L.3 Monitor maintenance management for MIMMS		MED	S			S	S	MED	SM	S	
L.4 Monitor reporting of sick, injured, wounded		SM				S	S	SM	SM	S	
MP.1 Maintain a current unit diary for JUMPS/WMS input		SM	S			S	S	MED	MED	S	
MP.2 Produce personnel-related rosters						S	S	MED		S	
MP.3 Produce periodic personnel-related reports						S		MED		S	
I.1 Prepare periodic intelligence reports & summaries				YES		S		SM		S	
I.2 Produce target bulletins		SM				S	S	SM		S	
I.3 Format messages for INTSUM and INTREP reporting				YES		S		SM		S	
I.4 Log receipt and classify content of incoming intelligence messages				YES		S		MED		S	
I.5 Maintain a current target information file		SM		YES		C	S	MED		S	

Table 6

ASHORE MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Trans-mission	Information Output/Display
Air Group (Cont.)	OT.1 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.2 Monitor daily air operations	SM				S		SM		S
	OT.3 Monitor post-flight reports	SM				S		SM		S
	OT.4 Monitor unit status for FORSTAT	SM	S			S	S	SM	SM	S
	OT.5 Monitor aircraft statistical data for FREDS	MED	C			S	S	MED	SM	S
	L.1 Monitor aviation supply and parts requisitions	MED				S		SM		S
	L.2 Monitor daily aircraft maintenance activity	SM				S		SM		S
	L.3 Monitor aviation maintenance, material, usage for SM	MED	S			S	S	MED	MED	S
	L.4 Monitor supply/fiscal management for SUADPS-EU	SM	S			S	S	MED	MED	S
	L.5 Monitor supply management for SASSY	MED	S			S	S	MED		S
LSG	L.6 Monitor maintenance management for MIMMS	MED	S			S	S	MED		S
	L.7 Report sick, injured, wounded	SM				S	S	SM	SM	S
	MP.1 Maintain a current unit diary for JUMPS/MMS input	SM	S			S	S	MED	MED	S
	MP.2 Produce personnel-related rosters	SM	S			S	S	MED		S
	MP.3 Produce periodic personnel-related reports					S		MED		S
	OT.1 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.2 Monitor unit status for FORSTAT	SM	S			S	S	SM	SM	S
	L.1 Monitor repair parts levels for critical items	SM			SM	S		SM		S
	L.2 Monitor supply management for SASSY	MED	S			S	S	MED	MED	S
	L.3 Monitor maintenance management for MIMMS	MED	S			S	S	MED	MED	S
Battalion	L.4 Monitor material management for MIMMS	SM	S			S	S	MED	SM	S
	L.5 Maintain medical-related records	MED				S		MED		S
	L.6 Monitor transportation availability	SM				S		SM		S
	MP.1 Maintain a current unit diary for JUMPS/MMS input	SM	S			S	S	MED	SM	S
	MP.2 Produce personnel-related rosters					S	S	SM		S
	I.1 Prepare periodic intelligence reports & summaries			YES		S		SM		S
	I.2 Produce target bulletins	SM				S	S	SM		S
	I.3 Format messages for INTSUM and INTREP reporting			YES		S	S	SM		S
	I.4 Log receipt and classify content of incoming intelligence messages			YES		S		MED		S

Table 6

ASHORE MONITORING/INVENTORYING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Battalion (Cont.)	I.5 Monitor enemy activity and traffic patterns	SM				C	S	SM		S
	I.6 Monitor contact reports in area of operations	SM				S		SM		S
	I.7 Monitor remote ground sensor activity	SM				S		SM		S
	I.8 Inventory sensors					S		SM		S
	I.9 Maintain a current target information file	SM		YES		C	S	MED		S
	OT.1 Produce operational and historical reports	MED		YES	SM	S	S	SM		S
	OT.2 Monitor unit status for FORSTAT	SM	S			S	S	SM	SM	S
	L.1 Monitor supplies for shortages	SM				S		SM		S
	L.2 Monitor maintenance activities	SM				S		SM		S
	L.3 Monitor supply management for SASSY	MED	S			S	S	MED	SM	S
	L.4 Monitor maintenance management for MIMMS	MED	S			S	S	MED	SM	S
	MP.1 Maintain current unit diary for JUMPS/MMS input	SM	S			S	S	MED	SM	S
	MP.2 Produce personnel-related rosters					S	S	SM		S
	Squadron	I.1 Prepare periodic intelligence reports & summaries	SM	S		SM	S	S	SM	
OT.1 Produce operational and historical reports		SM		YES		S	S	SM		S
OT.2 Monitor unit status for FORSTAT		SM	S			S	S	SM	SM	S
OT.3 Monitor post-flight reports		SM				S		SM		S
OT.4 Monitor aircraft statistical data for FREDS		SM	S			S	S	SM	SM	S
L.1 Monitor daily aircraft maintenance activity		SM				S		SM		S
L.2 Monitor aviation maintenance, material, usage for 3M		SM	S			S	S	SM	SM	S
L.3 Monitor aviation supply/fiscal management for SUADPS-EU		SM	S			S	S	SM	SM	S
L.4 Monitor supply management for SASSY		SM	S			S	S	SM	SM	S
L.5 Monitor maintenance management for MIMMS		SM	S			S	S	SM	SM	S
MP.1 Maintain a current unit diary for JUMPS/MMS input		SM	S			S	S	MED	SM	S
MP.2 Produce personnel-related rosters						S	S	SM		S
OT.1 Produce operational and historical reports		SM	S	YES	SM	S	S	SM		S
OT.2 Monitor unit status for FORSTAT		SM	S			S	S	SM	SM	S
LSU	L.1 Monitor supply management for SASSY	SM	S			S	S	MED	SM	S
	L.2 Monitor maintenance management for MIMMS	SM	S			S	S	MED	SM	S

Table 7

ASHORE FORECASTING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Forecast casualties & replacement requirements	SM			SM	S		SM		S
	MP.2 Forecast civilian & POW management requirements	SM			SM	S		SM		S
	OT.1 Forecast enemy capabilities and vulnerabilities	SM			SM	C		MED		S
	OT.2 Forecast weapon system availability	SM			MED	S	S	SM		S
	OT.3 Forecast ground combat air support requirements	SM			MED	C		MED		S
	OT.4 Forecast naval gunfire support requirements	SM			MED	C		MED		S
	L.1 Estimate operational use of ammunition	SM			MED	S		SM		S
	L.2 Forecast supply and equipment shortages/resupply rates	SM			MED	S	S	SM		S
Wing	L.3 Estimate time and labor requirements	SM			MED	C		MED		S
	MP.1 Forecast casualties & replacement requirements	SM			SM	S		SM		S
	OT.1 Forecast expected aircraft requirements	SM			MED	S		SM		S
	OT.2 Forecast surface AAW weapon requirements	SM			MED	S		SM		S
	OT.3 Forecast aircraft/helicopter/AAW weapon availability	SM			MED	S	S	MED		S
	OT.4 Forecast air defense capability	SM			MED	C		MED		S
	L.1 Estimate operational use of ordinance	SM			MED	S		SM		S
	L.2 Forecast supply and equipment shortages/resupply rates	SM			MED	S	S	SM		S
FSSC	L.3 Estimate time and labor requirements	SM			MED	C		MED		S
	L.4 Forecast aviation fuel consumption	SM			MED	S		SM		S
	MP.1 Forecast replacement requirements	SM			SM	S		SM		S
	MP.2 Forecast civilian & POW management requirements	SM			SM	S	S	SM		S
	OT.1 Forecast logistics supportability of operations	SM			MED	C		MED		S
	OT.2 Forecast personnel shift schedules	SM			MED	S		SM		S
	L.1 Forecast supply and equipment shortages/resupply rates	SM			MED	S	S	SM		S
	L.2 Estimate time and labor requirements	SM			MED	C		MED		S
Regiment	(No significant requirements identified)									
Air Group	(No significant requirements identified)									
LSC	(No significant requirements identified)									
Battalion	(No significant requirements identified)									

Table 7

ASHORE FORECASTING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Squadron	(No significant requirements identified) (No significant requirements identified)									
LSU										

Table 8

ASHORE SUPERVISING/CONTROLLING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Supervise processing/movement of replacements	SM				S		SM		S
	MP.2 Supervise reporting to MMS/JUMPS	SM	S			S	S	MED		S
	MP.3 Direct postal operations, services, and funds	SM		YES		S		SM		S
	MP.4 Supervise personnel record maintenance	SM				S		MED		S
	MP.5 Calculate individuals time lost, leave, and pay data	SM			SM	S		SM		S
	MP.6 Coordinate correspondence, routine orders, travel			YES		S		SM		S
	MP.7 Process leave requests/extensions					S		SM		S
	MP.8 Route messages and monitors those requiring action	SM				S		SM		S
	MP.9 Maintain a report control system					S		SM		S
	MP.10 Prepare personnel forms such as ID cards, fitness reports, certificates, and warrants	SM		YES		S		SM		S
	OT.1 Supervise coordination of fire support	SM		YES						
	OT.2 Supervise reporting to FORSTAT	SM		YES		S	S	SM		S
	OT.3 Direct establishments and maintenance of communications	SM	S			S		SM		S
	OT.4 Direct requisitioning and distribution of personnel, weapons, equipment, ammunition, and supplies	MED				C	C	MED		S
	OT.5 Supervise procurement, receipt, storage, issue of ammunition	SM				S	S			
	OT.6 Supervise preparation/use of training aids					S	S	SM		S
	OT.7 Publish lists of training films, literature, equipment			YES		S		SM		S
	OT.8 Supervise marksmanship training					S		SM		S
	L.1 Supervise the execution of logistics plans	SM		YES		S	S	SM		S
	L.2 Supervise logistics-related ADS reporting	MED	S		SM	S	S	MED		S
Wing	MP.1 Supervise processing/movement of replacements	SM				S		SM		S
	MP.2 Supervise reporting to MMS/JUMPS	SM	S			S	S	MED		S
	MP.3 Direct postal operations, services, and funds	SM		YES		S		SM		S
	MP.4 Supervise personnel record maintenance	SM				S		MED		S
	MP.5 Calculate individuals time lost, leave, and pay data	SM			SM	S		SM		S
	MP.6 Coordinate correspondence, routine orders, travel			YES		S		SM		S
	MP.7 Process leave requests/extensions					S		SM		S
	MP.8 Route messages and monitors those requiring action	SM				S		SM		S
	MP.9 Maintain a report control system					S		SM		S

Table 8

ASHORE SUPERVISING/CONTROLLING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (Cont.)	MP.10 Prepare personnel forms such as ID cards, fitness reports, certificates, and warrants	SM		YES		S		SM		S
	OT.1 Supervise coordination of fire support	SM		YES		S		SM		S
	OT.2 Supervise surface AAW and CAP operations	SM			MED	S		SM		S
	OT.3 Supervise air mission requests/assignments	SM				S		SM		S
	OT.4 Supervise assessment of completed missions	SM		YES	SM	S		SM		S
FSSG	OT.5 Supervise reporting to FORSTAT	SM	S			S		SM		S
	L.1 Supervise the execution of logistics plans	SM		YES		S		SM		S
	L.2 Supervise aviation-related ADS reporting	SM	S		SM	S	S	MED		S
	L.3 Supervise logistics-related ADS reporting	SM	S		SM	S	S	MED		S
	MP.1 Supervise processing/movement of replacements	SM				S		SM		S
	MP.2 Supervise reporting to WMS/JUMPS	SM	S			S	S	SM		S
	MP.3 Direct postal operations, services, and funds	SM		YES		S		SM		S
	MP.4 Supervise personnel record maintenance	SM				S		MED		S
	MP.5 Calculate individuals time lost, leave, and pay data	SM			SM	S		SM		S
	MP.6 Coordinate correspondence, routine orders, travel	SM		YES		S		SM		S
	MP.7 Process leave requests/extensions					S		SM		S
	MP.8 Route messages and monitors those requiring action	SM				S		SM		S
	MP.9 Maintain a report control system					S		SM		S
	MP.10 Prepare personnel forms such as ID cards, fitness reports, certificates, and warrants	SM		YES		S	S	SM		S
		OT.1 Supervise reporting to FORSTAT and JOPS	SM	S			S	S	SM	
L.1 Supervise CSS ADS reporting		SM	S		SM	S	S	MED		S
L.2 Supervise ADP facility operations		SM			MED	S	S	MED		S
L.3 Supervise the execution of logistics plans				YES		S		MED		S
L.4 Supervise repair and salvage of equipment						S		SM		S
L.5 Supervise embarkation and debarkations						C	C	MED		S
L.6 Supervise operations and maintenance of facilities and utilities						S		SM		S
	L.7 Coordinate fuel distribution					S		SM		S

Table 8

ASHORE SUPERVISING/CONTROLLING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
FSSG (Cont.)	L.8 Supervise shipment of goods and property	SM				S		SM		S
	L.9 Direct warehousing administration and stock location	MED		YES	MED	C	C	MED		S
	L.10 Prepare and distribute shipping documents					S		SM		S
	L.11 Supervise calibration activities for electronic	SM				S		SM		S
	F.1 Direct activities of a disbursing office	MED			SM	S	S	MED		S
	F.2 Supervise internal accounting of disbursing office				MED		S	MED		S
	F.3 Supervise execution of budgets					S		SM		S
	F.4 Supervise civilian pay, leave, and retirement	SM			SM	S	S	MED		S
	F.5 Supervise cost accounting operations				MED		S	MED		S
	F.6 Supervise timekeeping operations	SM			SM	S		SM		S
Regiment	F.7 Prepare civilian payrolls	SM			SM	S		SM		S
	F.8 Register allotments, bonds, deposits	SM			SM	S	S	SM		S
	F.9 Prepare disbursing reports and returns	SM		YES	SM	S		SM		S
	MP.1 Coordinate correspondence, routine orders, travel			YES		S		SM		S
	MP.2 Route messages and monitors those requiring action	SM				S		SM		S
	MP.3 Maintain a report control system					S		SM		S
	I.1 Maintain library services for maps, charts, reports					S		SM		S
	I.2 Maintain classified document control					S		SM		S
	I.3 Supervise dissemination of intelligence			YES		C	S	MED		S
	MP.1 Coordinate correspondence, routine orders, travel			YES		S		SM		S
Air Group	MP.2 Route messages and monitors those requiring action	SM				S		SM		S
	MP.3 Maintain a report control system					S		SM		S
	I.1 Maintain library services for maps, charts, reports					S		SM		S
	I.2 Maintain classified document control					S		SM		S
	I.3 Supervise dissemination of intelligence			YES		C	S	MED		S
	OT.1 Supervise coordination of fire support	SM		YES		S		SM		S
	OT.2 Supervise surface AAW and CAP operations	SM			MED	S		SM		S
	OT.3 Supervise air mission requests/assignments	SM				S		SM		S
	OT.4 Supervise assessment of completed missions	SM		YES	SM	S		SM		S

Table 8

ASHORE SUPERVISING/CONTROLLING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Air Group (Cont.)	L.1 Supervise the execution of logistics plans	SM		YES		S		SM		S
	L.2 Supervise aviation-related ADS reporting	SM	S		SM	S	S	MED		S
	L.3 Supervise logistics-related ADS reporting	SM	S		SM	S	S	MED		S
	L.4 Supervise operation and maintenance of facilities and utilities					S		SM		S
	L.5 Supervise shipment of goods and property	SM				S		SM		S
	L.6 Direct warehousing administration and stock location					S		SM		S
	L.7 Prepare and distribute shipping documents	MED		YES	MED	C	C	MED		S
	L.8 Supervise calibration activities for electronic equipment	SM				S		SM		S
LSG	MP.1 Coordinate correspondence, routine orders, travel			YES		S		SM		S
	MP.2 Route messages and monitors those requiring action	SM				S		SM		S
	MP.3 Maintain a report control system					S		SM		S
	I.1 Maintain library services for maps, charts, reports					S		SM		S
	I.2 Maintain classified document control					S		SM		S
	I.3 Supervise dissemination of intelligence			YES		C	S	MED		S
	L.3 Supervise the execution of logistics plans			YES		S		MED		S
	L.4 Supervise repair and salvage of equipment					S		SM		S
	L.5 Supervise embarkation and debarkation					C	C	MED		S
	L.6 Supervise operation and maintenance of facilities and utilities					S		SM		S
	L.7 Coordinate fuel distribution					S		SM		S
	L.8 Supervise shipment of goods and property	SM				S		SM		S
	L.9 Direct warehousing administration and stock location					S		SM		S
	L.10 Prepare and distribute shipping documents	MED		YES	MED	C	C	MED		S
Battalion Squadron LSU	L.11 Supervise calibration activities for electronic equipment	SM				S		SM		S
	(No significant requirements identified)									
	(No significant requirements identified)									
	(No significant requirements identified)									

A noticeable feature of the echelon structure of Tables 3 through 8 is the omission of separate entries for the MAGTF commands of the MAF, MAB, and MAU. SRI decided to leave these out since they would introduce further repetitiveness in an already lengthy treatment of requirements. This decision does not imply that no requirements exist for the MAGTF commands, for that is decidedly not the case; rather, SRI felt that the MAGTF command requirements could be relatively easily inferred from the division/wing/FSSG requirements.

The command and management responsibility of the MAGTF command element is to assemble the MAGTF from the individual combat elements and to coordinate their activities. This responsibility involves the same tasks that are identified for the division/wing/FSSG echelon--with the proviso that the purview of the MAGTF command is all the combat elements in combination rather than individually. A somewhat different aggregation, summarization, and decision-making policy may be invoked, but the functional capability requirement remains relatively unchanged from those of the individual combat elements.

One exception to this that arises in the deployment of a MAGTF involves the force and resource status reporting of the MAGTF command element. The Marine Corps wears two hats in the operational chain and must also report to the Fleet Commanders, Joint Task Force Commanders, Joint/Combined Task Force Commanders and CINCs. A specific requirement of the MAGTF command elements, therefore, is to gracefully interface with such commands so that information can be passed between the MAGTF command element and the appropriate Navy commands in such a manner as to foster its rapid and effective use. In short, the MAGTF command element has an additional, specific requirement to have its ADP reporting procedures interoperable with the ADP concepts of the higher levels of the command chain.

Another consideration, pertinent to the interpretation of the tables is the relationship of this statement of requirements to the requirements investigations of other ongoing ADPS developments (for example, MTACCS and NALCOMIS) which also focus on ADP activity. Possible duplication of effort is the particular issue of concern.

Since the various MTACC systems and NALCOMIS will be introduced at different times during the 1980 decade, it is not realistic at this time to define precise requirement domains between these systems and a command and management ADPS for the FMF. Neither MIPS, MILOGS, nor TCO will be operational in the early 1980s, so even requirements that may eventually be met by these systems have been included among the ADS functional and performance requirements of Tables 3 through 8. SRI's interpretation of the scope of this study is that any FMF ADPS proposed for the period 1980-1990 should be capable of meeting these requirements until they are met operationally by other systems.

A more complicated case is presented by the area of intelligence where the MTACC system, MAGIS, is to be operational in the early 1980s. The reason that SRI addressed the intelligence area at all in this study (versus leaving it entirely to the MTACCS development) is that certain intelligence-related functions performed by lower echelon commanders and their S-2 staffs are not accommodated under MAGIS. Such functions may be satisfied in whole, or part, by TCO later in the 1980 decade; the fact that they are legitimate candidates for ADP has been established by the SDA experience.

SRI's stance on this issue has been to assume that MAGIS would cover all the information processing needs of the MAG command division, and wing echelons. Lower echelon needs have been identified, and entries therefore appear at regiment/air group level and below in the intelligence areas of the ADS functional requirements contained in Tables 3 through 8. No intelligence-related entries appear for the division or wing level.

III FMF REQUIREMENTS AFLOAT

Amphibious warfare requires that FMF commanders and their staffs perform a variety of command and management functions afloat. Information processing is an indispensable element of this responsibility. In addition to administrative record keeping, information processing afloat supports planning, embarkation, rehearsal,* movement, and assault activities. Means for collection, processing, and dissemination of data all must, therefore, be provided afloat.

The environment-unique activities act to shape the afloat requirements for specific ADS capabilities. Other major environmental influences stem from the Navy shipboard facilities available to accommodate Marine Corps ADPS; from aspects of Navy/Marine Corps coordination in command, aviation, and supporting arms; and from space constraints aboard amphibious ships that cause FMF units and equipments to be dispersed among several ships.

A. Environment Overview

1. Organizational Factors

FMF elements are deployed afloat in two cases (excluding training exercises). One case involves forward deployment of a MAU in peacetime; the other involves an embarked landing force--either a MAU, MAB, or MAF--that is directed to perform an amphibious assault operation.

During forward deployment of a MAU, the information-processing activities are administration-oriented--as they are in garrison. They

* Given the sophisticated monitoring capabilities of the enemy, traditional rehearsal activities may be compromised. This fact may require that timing, scheduling and coordination actions be verified by exercising computer models.

emphasize resource management and training; hence, the activity favors the scheduled reporting of administrative information external to the MAU. Such information is used by Class I functional ADS to provide general support to the MAU. The work load is comparable to (or slightly below) that found in garrison. Forward deployed MAU's may be expected to remain afloat for extended periods.

In contrast, the information-processing activities of a landing force are oriented toward the accomplishment of an amphibious task. Information-processing priorities favor the direct support of local activities undertaken to plan and carry out the assault. The requirement for external reporting does not disappear; rather, it becomes subordinate in emphasis to the tactical requirement. Information-processing activity may be expected to increase dramatically both for local needs and for external reporting because of the higher transaction rates generated by the warfare action. A landing force would not be expected to remain afloat for extended periods of time.

2. Operations and Activities

a. Forward Deployed MAU

The forward deployed MAU primarily supports the mission of naval presence. Visibility, readiness, and quick reaction to contingencies are attributes required by this mission. The information processing system is called upon to maintain current equipment/supply status (location, availability, and condition) and personnel status (location, skills, and training). It is also called upon to audit administrative transactions affecting manpower, fiscal, intelligence, and logistic management. Once directed to fulfill the "projection of naval power ashore" mission, the activities of the deployed MAU become those of an assault operation. The information processing emphasis changes to reflect that transition.

b. Embarked Landing Force

The landing force commander (CLF) directs a series of planning and execution actions afloat designed to accomplish the amphibious operation objectives. These actions provide support to the following phases of amphibious warfare:³⁵

- Planning Phase--the period extending from the issuance of the initiating directive to embarkation.
- Embarkation Phase--the period during which the forces, with their equipment and supplies, embark in assigned shipping.
- Rehearsal Phase--The period during which the prospective operation is rehearsed for the purpose of testing the adequacy of plans, the timing of detailed operations, and the combat readiness of participating forces; ensuring that all echelons are familiar with plans; and testing communications.
- Movement Phase--the period during which the components of the amphibious task force move from the points of embarkation to the objective area.
- Assault Phase--the period between the arrival of the major assault forces of the amphibious task force in the objective area and the accomplishment of the amphibious task mission.

These phases, in effect, transform the landing force from its peacetime administrative configuration to a combat task-organized configuration. The effect of this transition on information-processing requirements is an important one. It is important that the information-processing capability be as fully transformable as the organization itself.

3. Operational Interfaces

Standing between the garrison and combat ashore environments, the afloat operating environment generates requirements that exemplify the flexibility required of the FMF information-processing capability. The implied "systems" obligation of this middle position is one of integrating all aspects of the transition.

The transition between the garrison and afloat operating environments is manifested in the embarkation phase. Here, the information-processing system correlates men and materiel with the available shipping and landing strategy, and it provides an accounting of that action. At this time also, information critical to the planning of the assault operation is assembled for immediate, as well as future, use.

The transition between the afloat and combat ashore operating environments centers on the assault phase and the transfer of command ashore. During the amphibious landing the information-processing capability afloat must maintain current information to support landing operations. Simultaneously, it must be preparing to transfer that capability ashore.

4. Major Factors

To perform the data collection, manipulation, and transmission tasks that are required of it afloat, the FMF information-processing system may have to depend on Navy resources. This has been a common occurrence especially in the case of ADP equipment and telecommunications facilities. For example, the Navy has designated a computer on LCC class ships for FMF use, but the computer is operated by Navy personnel.

Communications between ships to monitor FMF units/equipments, as well as communications to Marine Corps Supporting Establishment agencies must all pass through regular Navy communications channels. This requires message formatting and acceptance of Navy imposed communications priorities. Hence, electronic communications may be slow (and in EMCON conditions even nonexistent) for substantial periods of time.

Because of shipboard space limitations, FMF units and equipment may be spread over several ships. The CLF is separated from large segments of the operating and support units in most cases. This situation imposes an added burden on the information-process system to accommodate data entry, information dissemination, planning coordination, and access to automated resources by all its potential users.

B. Requirements Statement

Requirements for information-processing activity afloat stem from command and management activities undertaken to support FMF amphibious objectives, to augment FMF amphibious standing operating procedures (SOP's), and to report to higher authorities changes in FMF condition or status. The results of SRI's investigation of these activities are reported in Part B below.

First, major areas of concern for, and the nature of, management functional requirements afloat are described. This description encompasses the afloat contribution to the second of SRI's three-level hierarchy of information-processing requirements. Following that, specific echelon-level tasks are identified as the day-to-day manifestation of those management responsibilities. Finally, ADS functional and performance requirements are further detailed and associated with each task.

I. Management Functional Requirements

The following paragraphs provide the focus of FMF requirements for command and management ashore as they relate to the six management functions identified in Section I. For each management function, requirements are distinguished as being associated with manpower, intelligence, operations, logistics, or financial responsibilities of the FMF unit commanders and their general/executive staffs, rather than the tactical control responsibilities of the MAGTF air control and fire control agencies. The following correlations can, therefore, be assumed:

- Manpower management functional requirements are largely derived from FMF commander and G-1/S-1 responsibilities (or special staff responsibilities under the cognizance of the G-1/S-1)
- Intelligence management functional requirements are largely derived from FMF commander and G-2/S-2 responsibilities (or special staff responsibilities under the cognizance of the G-2/S-2)
- Operations management functional requirements are largely derived from FMF commander and G-3/S-3 responsibilities (or special staff responsibilities under the cognizance of the G-3/S-3)

- Logistics management functional requirements are derived both from FMF commander and G-4/S-4 responsibilities (or special staff responsibilities under the cognizance of the G-4/S-4), and from responsibilities of FMF units that are task organized to provide logistics support (for example, the Supply and Maintenance Battalions, or the H&MS)
- Financial management functional requirements are derived from FMF commander and comptroller staff responsibilities.

a. Planning

Planning afloat is concerned with the future integration of men and materiel to support the assault phase of the amphibious landing, as well as to establish direction for sustained activity ashore. Such planning comprises the major components of the initial staff estimates prepared for the MAGTF commanders. The purpose of the planning efforts is to provide guidelines for coordinated and efficient procedures for conducting and supporting the amphibious landing and initial stages of the period ashore. Planning in the afloat environment, therefore, has a well defined objective.

- Manpower planning requirements suited to ADP include those necessary to accommodate individual and unit involvement in the embarkation, movement, and debarkation activities necessitated by the available shipping resources.
- Intelligence planning requirements suited to ADP include those that aid in assembly and dissemination of assault area information and initial target intelligence.
- Operations planning requirements suited to ADP include preparation and development of the Operations Plan to specify the concept of operations ashore, the scheme of maneuver ashore, and the plan for supporting fires.
- Logistics planning requirements suited to ADP include those that aid the organization and implementation of the embarkation, ship-to-shore movement, and the logistics support concept for units and equipments once they have landed.

b. Programming

Programming afloat requires the specific assignment of men and materiel to shipboard activities, as well as the scheduling of such activities to meet the amphibious operation objectives. Major products of the programming activity are the embarkation plans and the landing documents. Other major products are the initial Operations Plan and Administrative/Logistics Plan that will direct early activity ashore. The purpose of the programming effort is to provide specific instructions for movement onto and off the amphibious ships; hence, it is well defined with relatively well known needs.

- Manpower programming requirements suited to ADP include preparing and issuing personnel orders, assigning personnel and units to ships, scheduling replacements, and drafting personnel annexes for various plans.
- Intelligence programming requirements suited to ADP include preparing intelligence collection plans and drafting intelligence material for inclusion in the Operations Plan.
- Operations programming requirements suited to ADP include preparing and drafting the Operations Plan, scheduling rehearsal activities, preparing the landing force plan of attack, and drafting procedures for the employment of specialized equipment.
- Logistics programming requirements suited to ADP include preparing the embarkation plans, the debarkation schedule, and the work assignments to accomplish loading and unloading of the ships.

c. Evaluating

Evaluating afloat requires the assessment of how effectively men, materiel, and plans are coordinated for the amphibious landing and what are the lessons learned from the rehearsal activities. This is a necessary function that provides background for preparing the landing plans. The purpose of the evaluating effort is to identify problem areas, as well as to investigate future options related to the amphibious landing.

- Manpower evaluating requirements suited to ADP include those concerned with assessing replacement requirements, schedules, and priorities; appraising personnel morale; and determining headquarters support requirements.
- Intelligence evaluating requirements suited to ADP include those concerned with assessing enemy targets, capabilities, tactics, as well as assessing FMF capabilities to accomplish desired objectives against the enemy.
- Operations evaluating requirements suited to ADP include those concerned with examining different options with regard to landing schedules, the effective use of equipment and transportation to accomplish initial tasks ashore, and to assess the supportability and effect of firepower and mobility options ashore.
- Logistic evaluating requirements suited to ADP include those concerned with analyzing ship loading/unloading options, and the operational use of floating supply dumps.

d. Monitoring/Inventorying

Monitoring/inventorying afloat requires the maintenance of records concerning the status of FMF manpower and materiel resources, as well as the support and services that these resources are providing in preparation of the assault phase. Two purposes are served by the monitoring/inventorying activity that takes place afloat. The first is to maintain up-to-date status information locally for direct support of operations, and the second is to report status information externally to higher authorities for general support of combat capability. This function takes place continuously, and it is aggregated and reported on a time period that varies according to the application that is being addressed.

- Manpower monitoring requirements suited to ADP include those that aid the capture and entry of personnel-related events primarily through the unit diary. External reporting is directed heavily toward JUMPS/MMS input.
- Intelligence monitoring requirements suited to ADP include those involved in maintaining target files, enemy order of battle files, situation files, and information concerning the assault area.

- Operations monitoring requirements suited to ADP include those that oversee aspects of operations such as the progress of ship-to-shore movement and rehearsals, as well as the capability to oversee readiness (report to FORSTAT) and to compile historical records.
- Logistics monitoring requirements suited to ADP include those concerned with overseeing the status, location, and condition of combat essential material, maintenance activity, supply requisitions, and medical records. Systematic reporting is directed heavily toward SASSY, MIMMS, 3M, and SUADPS-EU.

e. Forecasting

Forecasting afloat requires the estimate of future requirements for men, material, information, firepower, and mobility, as well as estimates of enemy defensive activities and capability. The purpose of this effort is to anticipate and correct resource shortages before they occur and to adjust resources in short supply to derive the maximum effectiveness from their application to the assault phase.

- Manpower forecasting requirements suited to ADP include those associated with the estimation of casualties and replacement requirements.
- Intelligence forecasting requirements suited to ADP include those associated with estimating enemy capabilities and vulnerabilities with regard to personnel, firepower, mobility, and geography in the assault area.
- Operations forecasting requirements suited to ADP include those associated with estimating air and ground effectiveness for various missions based on availability, firepower, responsiveness, and mobility parameters that will be prevalent during the assault phase.
- Logistics forecasting requirements suited to ADP include those that assist estimating supply and ammunition usage rates, the responsiveness of the supply chain, and the anticipated availability of equipment, personnel, and weapons systems to carry out missions of the assault phase.

f. Supervising/Controlling

Supervising/controlling afloat requires the direction and redirection of men and material to complete activities associated with embarkation, rehearsal, movement, and assault phases of an amphibious assault. The primary purpose is to relate the progress of scheduled missions and training to expected performance norms, and to apply corrective actions when deficiencies are noted or forecast. A complementary purpose is to assure that priority items are given due attention and access to resources that may have been previously assigned to lesser priority items. Supervising/controlling in the afloat environment is a near real-time activity.

- Manpower supervising requirements suited to ADP include the administrative tracking of personnel status and the dissemination of pertinent personnel data.
- Intelligence supervising requirements suited to ADP include controlling the collection of information, access to information, and dissemination of information to appropriate agencies and FMF units.
- Operations supervising requirements suited to ADP include those that coordinate and direct the activities and responsibilities of various FMF units for firepower, mobility, reinforcement, and support services during and immediately after the amphibious assault.
- Logistics supervising requirements suited to ADP include those associated with controlling stocks of supplies, distributing supplies, overseeing maintenance actions and schedules, and allocating transportation for ship-to-shore movement.

2. ADS Functional and Performance Requirements

The management functional requirements are further detailed and expanded in the statement of ADS functional and performance requirements reported in the matrix format of Tables 9 through 14. Definitions of the various table categories and performance measures are found in Section I. In addition, the echelon-activity tasks have been grouped for association

Table 9

AFLOAT PLANNING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Prepare personnel staff estimates			YES		S		SM		S
	MP.2 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S
	MP.3 Plan personnel transfers, classifications, promotions	SM			SM	C	S	MED		S
	OT.1 Prepare operations staff estimates			YES		S		SM		S
	OT.2 Develop ground concept of operations ashore			YES		S		SM		S
	OT.3 Develop contingency plans	SM		YES	MED	S		MED		C
	OT.4 Plan the ship-to-shore movement	MED			MED	S		MED		S
	OT.5 Plan the scheme of maneuver ashore	SM			SM	S		MED		C
	OT.6 Plan communications ashore	SM				S		SM		S
	L.1 Prepare logistics staff estimates			YES		S		SM		S
	L.2 Plan embarkation organization & procedures			YES		S		SM		S
	L.3 Plan tactical motor transport requirements					S		SM		S
Wing	L.4 Plan assault shore party requirements					S		SM		S
	L.5 Plan combat engineer employment					S		SM		S
	MP.1 Prepare personnel staff estimates			YES		S		SM		S
	MP.2 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S
	MP.3 Plan personnel transfers, classifications, promotions	SM			SM	C	S	MED		S
	OT.1 Prepare operations staff estimates			YES		S		SM		S
	OT.2 Develop air concept of operations ashore	SM		YES	MED	S		SM		S
	OT.3 Plan tactical employment of air and surface AAW	SM			MED	S		MED		C
	OT.4 Plan aviation communications ashore	SM				S		SM		S
	L.1 Prepare logistics staff estimates			YES		S		SM		S
	L.2 Plan combat engineer employment					S		SM		S
	L.3 Plan cargo transportation requirements					S		SM		S
FSSG	L.4 Plan fuel transportation requirements					S		SM		S
	MP.1 Prepare personnel staff estimates			YES		S		SM		S
	MP.2 Plan procurement/assignment of replacements	SM			SM	C		SM		S
	MP.3 Plan personnel transfers, classifications promotions	SM			SM	C		MED		S
	MP.4 Plan personnel services (postal, disbursing, medical)					S		SM		S

Table 9
AFLOAT PLANNING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
FSSG (Cont.)	OT.1 Prepare operations staff estimates			YES		S		SM		S
	OT.2 Develop CSS concept of operations ashore	SM			SM	S		MED		S
	L.1 Prepare logistics staff estimates			YES		S		SM		S
	L.2 Plan supply requirements ashore	SM			MED	S	S	MED		S
	L.3 Plan maintenance requirements ashore	SM			MED	S		SM		S
	L.4 Plan transportation requirements ashore					S		SM		S
	L.5 Plan fuel requirements ashore				SM	S		SM		S
	L.6 Plan embarkation support requirements					S		SM		S
	L.7 Plan medical/dental requirements ashore					S		SM		S
Regiment	L.8 Plan personnel and logistics administration requirements					S		SM		S
	L.9 Plan employment of floating dumps					S		SM		S
	MP.1 Prepare personnel staff estimates			YES		S		SM		S
	I.1 Prepare intelligence staff estimates			YES		S		SM		S
	OT.1 Prepare operations staff estimates			YES		S		SM		S
	OT.2 Develop concept of operations ashore recommendations			YES		C		SM		S
	OT.3 Develop scheme of maneuver ashore recommendations			YES		S	S	SM		S
	OT.4 Develop plan of supporting fires recommendations			YES		S		SM		S
	OT.5 Prepare landing plan recommendations	SM		YES	SM	S	S	MED		S
Air Group	L.1 Prepare logistics staff estimates			YES		S		SM		S
	L.2 Plan supply, maintenance, transportation requirements					S		MED		S
	MP.1 Prepare personnel staff estimates			YES		S		SM		S
	I.1 Prepare intelligence staff estimates			YES		S		SM		S
	I.2 Prepare periodic intelligence studies & reports			YES		S		SM		S
	OT.1 Prepare operations staff estimates			YES		S		SM		S
	OT.2 Develop air defense plans	MED			MED	S		MED		S
	OT.3 Develop offensive air support plans	MED			MED	S		MED		S
	OT.4 Prepare aviation landing plan recommendations				SM	S		SM		S
	L.1 Prepare logistics staff estimate			YES		S		SM		S

Table 9
AFLOAT PLANNING REQUIREMENT (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Air Group (Cont.) LSG	L.2 Plan supply, maintenance, transportation requirements							MED		S
	MP.1 Prepare personnel staff estimates			YES				SM		S
	MP.2 Plan personnel services (postal, disbursing, medical)							SM		S
	OT.1 Prepare operations staff estimates			YES				SM		S
	L.1 Prepare logistics staff estimates			YES				SM		S
Battalion	L.2 Plan supply requirements ashore				SM			MED		S
	L.3 Plan maintenance requirements ashore				SM			MED		S
	L.4 Plan transportation requirements ashore							SM		S
	L.5 Plan medical/dental requirements ashore							SM		S
	MP.1 Prepare personnel staff estimates			YES				SM		S
Squadron	L.1 Prepare intelligence staff estimates			YES				SM		S
	OT.1 Prepare operations staff estimates			YES				SM		S
	OT.2 Develop concept of operations ashore recommendations			YES				SM		S
	L.1 Prepare logistics staff estimates			YES				SM		S
	L.2 Prepare supply, maintenance, transportation requirements			YES				SM		S
LSU	MP.1 Prepare personnel staff estimates			YES				SM		S
	L.1 Prepare intelligence staff estimates			YES				SM		S
	L.2 Prepare periodic intelligence studies & reports			YES				SM		S
	OT.1 Prepare operations staff estimates			YES				SM		S
	L.1 Prepare logistics staff estimates			YES				SM		S
LSU	L.2 Plan supply, maintenance, transportation requirements			YES				SM		S
	MP.1 Prepare personnel staff estimates			YES				SM		S
	OT.1 Prepare operations staff estimates			YES				SM		S
	L.1 Prepare logistics staff estimates			YES				SM		S
	L.2 Prepare logistics staff estimates			YES				SM		S

Table 10

AFLOAT PROGRAMMING REQUIREMENTS

		Required Data Processing Functions									
Echelon	Representative Activity	Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display	
Division	MP.1 Prepare the Admin/Log Plan personnel annex	SM		YES		S		SM		S	
	MP.2 Recommend allocation of replacements	SM			SM	S	S	MED		S	
	MP.3 Schedule personnel status changes	SM		YES		S	S	MED		S	
	OT.1 Prepare the Ops Plan	MED		YES	MED	S		MED		S	
	OT.2 Prepare the Ops Plan concept of operations annex	SM		YES		S		SM		S	
	OT.3 Prepare the Ops Plan landing plan annex	SM		YES		S		SM		S	
	OT.4 Prepare the Ops Plan fire support coordination plan	SM		YES		S		SM		S	
	OT.5 Prepare input to the naval gunfire annex	SM		YES		S		SM		S	
	OT.6 Prepare the Ops Plan communication-electronics annex	SM		YES		S		SM		S	
Wing	OT.7 Prepare the Ops Plan antimateriel annex	SM		YES		S		SM		S	
	OT.8 Prepare inputs to the following: landing craft availability table; pontoon causeway and barge plan; landing craft employment	MED		YES	SM	C	C	MED		S	
	OT.9 Prepare the following: assault schedule; serial assignment table; landing sequence table; amphibian vehicle availability table; amphibian vehicle employment plan	MED		YES	SM	C	C	MED		S	
	L.1 Prepare embarkation plans	MED		YES	MED	S		MED		S	
	L.2 Prepare landing craft/amphibious vehicle assignment table	SM		YES		S		SM		S	
	L.3 Prepare debarkation schedule	MED		YES	MED	S		MED		S	
	MP.1 Prepare the Admin/Log Plan personnel annex	SM		YES		S		SM		S	
	MP.2 Recommend allocation of replacements	SM		YES		S		MED		S	
	MP.3 Schedule personnel status changes	SM		YES		S		MED		S	
	OT.1 Prepare the Ops Plan air operations annex	SM		YES	MED	S		SM		S	
	OT.2 Prepare the Ops Plan air support annex	SM		YES	MED	S		SM		S	
	OT.3 Prepare the Ops Plan AAW annex	SM		YES	MED	S		SM		S	
	OT.4 Prepare the aviation landing plan	SM		YES		S		SM		S	
	OT.5 Schedule air missions	SM				S		SM		S	
		L.1 Prepare aviation embarkation plans	MED		YES	MED	S		SM		S
	L.2 Prepare the aviation landing schedule	MED			MED	S		SM		S	
	L.3 Prepare aviation input to Admin/Log Plan	SM		YES		S		SM		S	

Table 10
AFLOAT PROGRAMMING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Hand-ling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Trans-mission	Information Output/Display
FSSG	MP.1 Prepare the Admin/Log Plan personnel annex	SM		YES		S		SM		S
	MP.2 Recommend allocation of replacements					S		SM		S
	MP.3 Schedule personnel status changes					S		SM		S
	OT.1 Prepare CSS input to Ops Plan	MED		YES	MED	S	S	MED		S
	L.1 Prepare the Admin/Log Plan	SM		YES		S		MED		S
Regiment	L.2 Prepare the embarkation plan	MED		YES	MED	S		MED		S
	L.3 Prepare the embarkation loading schedule	MED		YES	MED	S	S	MED		S
	L.4 Schedule support for shore party operations					S		SM		S
	L.5 Maintain current logistics support concept plans					S		SM		S
	MP.1 Prepare input to the personnel annex	SM		YES		S		MED		S
Air Group	I.1 Coordinate battalion intelligence plans	SM		YES		S		SM		S
	OT.1 Prepare input to the Ops Plan	SM		YES		S		SM		S
	OT.2 Prepare input to LF landing documents	SM		YES		S		SM		S
	OT.3 Prepare input to Ops Plan annexes	SM		YES		S		SM		S
	L.1 Prepare embarkation plan recommendations	SM			SM	S		SM		S
LSG	L.2 Prepare debarkation assignments & schedules	SM		YES		S		SM		S
	L.3 Prepare input to the Admin/Log Plan	SM		YES		S		SM		S
	MP.1 Prepare input to the personnel annex	SM		YES		S		SM		S
	I.1 Prepare input to Ops Plan intelligence annex	SM		YES		S		SM		S
	OT.1 Consolidate helicopter employment & assault landing table	SM				S		SM		S
	OT.2 Prepare helicopter availability table					S		SM		S
	OT.3 Prepare helicopter landing diagram					S		SM		S
	OT.4 Prepare aviation unit operation plan	SM		YES		S		SM		S
	OT.5 Prepare air support annex to the Ops Plan	SM		YES		S		SM		S
	L.1 Coordinate aviation logistics support plan			YES		S		SM		S
	L.2 Prepare aviation embarkation plans	MED		YES	MED	S		MED		S
	L.3 Prepare aviation debarkation plans	MED		YES	MED	S		MED		S
	MP.1 Prepare input to the personnel annex	SM		YES		S		SM		S

Table 10
AFLOAT PROGRAMMING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
LSG (cont.)	OT.1 Prepare input to the Ops Plan	SM		YES		S		SM		S
	L.1 Prepare input to the Admin/Log Plan	SM		YES		S		SM		S
	L.2 Prepare embarkation plans	MED		YES	MED	S		MED		S
	L.3 Prepare support for shore party operations					S		SM		S
Battalion	MP.1 Prepare input to the personnel annex	SM		YES				SM		S
	I.1 Schedule intelligence gathering activities ashore					S		SM		S
	OT.1 Prepare input to Ops Plan			YES		S		SM		S
	OT.2 Prepare detailed concept of operations ashore					S		SM		S
	OT.3 Prepare input to LF landing documents	SM		YES		S		SM		S
	OT.4 Prepare plans for inclusion in Ops Plan annexes			YES		S		SM		S
	OT.5 Prepare landing craft/amphibious vehicle assignment table	SM				S		SM		S
	OT.6 Prepare elements of landing diagram					S		SM		S
	OT.7 Prepare input to the assault schedule					S		SM		S
	OT.8 Prepare input to ship debarkation schedule			YES		S		SM		S
	OT.9 Coordinate helicopter employment/assault landing schedule	SM				S		SM		S
	OT.10 Coordinate heli- team & serial assignment table	SM				S		SM		S
	OT.11 Prepare detailed scheme of maneuver ashore			YES		S		SM		S
	OT.12 Prepare detailed plan of supporting fires			YES		S		SM		S
	OT.13 Prepare detailed landing plan recommendations					S		SM		S
	L.1 Prepare Admin/Log Plan recommendations					S		SM		S
Squadron	L.2 Prepare embarkation plan recommendations					S		SM		S
	MP.1 Prepare input to the personnel annex					S		SM		S
	I.1 Schedule aerial reconnaissance missions					S		SM		S
	OT.1 Prepare helicopter employment & assault landing table	SM		YES		S		SM		S
LSU	OT.2 Prepare unit operation plan					S		SM		S
	MP.1 Prepare input to the personnel annex			YES		S		SM		S
	OT.1 Prepare input to the Ops Plan			YES		S		SM		S
	L.1 Prepare input to the Admin/Log Plan			YES		S		SM		S

Table 10
AFLOAT PROGRAMMING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/ Validation	Text Hand- ling	Mathematical Calculation	Information Storage/ Retrieval	File Manage- ment	File Storage	Data Trans- mission	Information Output/ Display
LSU (cont.)	L.2 Prepare embarkation plans	SM		YES		S		SM		S
	L.3 Prepare debarkation schedules	SM		YES		S		SM		S

Table 11

AFLOAT EVALUATING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Determine replacement requirements	SM			SM	S	S	MED		S
	MP.2 Determine personnel management requirements					S	S	MED		S
	OT.1 Evaluate the changing tactical situation	SM				S	S	SM		S
	OT.2 Determine priority for resources in short supply	SM			MED		S	MED		S
	OT.3 Determine priority for replacements	SM				S	S	SM		S
Wing	OT.4 Determine fire support requirements	SM			MED	S	S	SM		S
	OT.5 Evaluate adequacy of plans and support during rehearsal				MED	S		MED		S
	L.1 Evaluate ship loading options	MED			MED	S		MED		S
	L.2 Evaluate ship unloading methods	MED			MED	S		MED		S
	MP.1 Determine replacement requirements	SM			SM	S	S	MED		S
FSSG	MP.2 Determine personnel management requirements					S	S	MED		S
	OT.1 Evaluate the changing tactical situation	SM				S	S	SM		S
	OT.2 Determine priority for resources in short supply	SM			MED		S	MED		S
	OT.3 Determine priority for replacements	SM				S	S	SM		S
	MP.1 Determine replacement requirements	SM			SM	S	S	MED		S
Regiment	MP.2 Determine personnel management requirements					S	S	MED		S
	OT.1 Evaluate the adequacy of unit operations	SM			MED	S		MED		S
	OT.2 Evaluate the availability of operational resources	MED			MED	S		MED		S
	L.1 Evaluate the ship loading organization & means	MED			MED	S		MED		S
	L.2 Evaluate the ship unloading requirements	SM			MED	S		MED		S
Air Group	(No significant requirements identified)									
	(No significant requirements identified)									
	(No significant requirements identified)									
	(No significant requirements identified)									
	(No significant requirements identified)									
Squadron	(No significant requirements identified)									
	(No significant requirements identified)									
	(No significant requirements identified)									
	(No significant requirements identified)									
	(No significant requirements identified)									

Table 12

AFLOAT MONITORING/INVENTORYING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Maintain a current master personnel file	MED	S		SM	S	C	LG		C
	MP.2 Compile daily strength of command information					S		MED		C
	MP.3 Produce personnel-related rosters					S	S	MED		S
	MP.4 Produce periodic personnel status reports					S		MED		S
	MP.5 Monitor unit diary transactions for JUMPS/WMS	MED	C			C	C	MED	LG	C
	MP.6 Monitor T/O's for TMR	SM	C			S		MED	MED	S
	OT.1 Maintain a landing serial file	MED	S			S	S	MED		S
	OT.2 Monitor the status and build-up of assets ashore	MED			SM	S		MED		S
	OT.3 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.4 Document the command chronology	MED		YES		S		MED		S
Wing	OT.5 Monitor unit status for FORSTAT	SM	C			C	C	MED	MED	S
	L.1 Compile and maintain statistical logistics data	MED	S		MED	S	S	MED		S
	L.2 Monitor supply and parts requisitions	SM				S	S	SM		S
	L.3 Monitor daily maintenance activity	SM				S	S	SM		S
	L.4 Monitor supply management for SASSY	SM	C			C	C	MED	MED	S
	L.5 Monitor maintenance management for MINMS	SM	C			C	C	MED	MED	S
	L.6 Report sick, injured, wounded	SM	S			S	S	SM	SM	S
	L.7 Monitor status of logistics build-up ashore	SM				S	S	MED	SM	S
	MP.1 Maintain a current master personnel file	MED	S			S	C	LG		C
	MP.2 Compile daily strength of command information	MED	S		SM	S		MED		C
	MP.3 Produce personnel-related rosters					S	S	MED		S
	MP.4 Produce periodic personnel-related reports					S		MED		S
	MP.5 Monitor unit diary transactions for JUMPS/WMS	MED	C			C	C	MED	LG	C
	MP.6 Monitor T/O's for TMR	SM	C			S		MED	MED	S
	OT.1 Monitor the build-up of aviation assets ashore	MED				S	S	MED		S
	OT.2 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.3 Monitor aircraft alert status					S		SM		S
	OT.4 Monitor daily flights and aircraft availability	SM				S		SM		S
	OT.5 Monitor aircraft maintenance status	SM				S		SM		S
	OT.6 Monitor post-flight reports	SM				S		SM		S

Table 12

AFLOAT MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (cont.)	OT.7 Monitor aircraft statistical data for FREDS	MED				S		MED	LG	S
	OT.8 Document the command chronology	MED		YES				MED		S
	OT.9 Monitor unit status for FORSTAT	SM	C			C	C	MED	MED	S
	L.1 Compile and maintain statistical logistics data	MED	S		MED	S	S	MED		S
	L.2 Monitor logistic aircraft status	SM				S		SM		S
	L.3 Monitor aviation supply and parts requisitions	MED				S	S	MED		S
	L.4 Monitor daily aircraft maintenance activity	MED				S	S	MED		S
	L.5 Monitor aviation maintenance, material, usage for 3M	MED	C			C	C	MED	MED	S
	L.6 Monitor supply/fiscal management for SUADPS-EU	MED	C			C	C	MED	MED	S
FSSG	L.7 Monitor supply management for SASSY	SM	C			C	C	MED	MED	S
	L.8 Report sick, wounded, injured	SM	S			S	S	MED	SM	S
	L.9 Monitor the build-up of aviation assets ashore	MED			SM	S	S	MED		S
	MP.1 Maintain a current master personnel file	MED	S			S	C	LG		C
	MP.2 Compile daily strength of command information				SM	S		MED		C
	MP.3 Produce personnel-related rosters					S	S	MED		S
	MP.4 Produce periodic personnel-related reports					S		MED		S
	MP.5 Monitor unit diary transactions for JUMPS/WMS	MED	C			C	C	MED	LG	C
	MP.6 Monitor T/O's for TMR	SM	C			S		MED	MED	S
	OT.1 Maintain a landing serial file	MED	S			S	S	MED		S
	OT.2 Monitor the build-up of logistics systems ashore	MED			SM	S		MED		S
	OT.3 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.4 Document the command chronology	MED		YES		S		MED		S
	OT.5 Monitor unit status for FORSTAT	SM	C			C	C	MED	MED	S
	L.1 Compile and maintain statistical logistics data	MED	S		MED	S	S	MED		S
	L.2 Produce daily logistics summaries					S		MED		S
		L.3 Produce ship unloading status report	MED				S		MED	
L.4 Monitor repair parts levels for critical items		SM				S		SM		S
L.5 Provide centralized ADS for supply (SASSY)		MED	C			C	C	LG	LG	S
L.6 Provide centralized ADS for maintenance (MIMMS)		MED	C			C	C	LG	LG	S
L.7 Monitor the status of floating dumps		SM				S		SM		S

Table 12

AFLOAT MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
FSSG (cont.) Regiment	L.8 Maintain medical-related records	SM				S	S	MED		S
	MP.1 Maintain current unit diary	SM				S	S	MED	MED	S
	MP.2 Produce personnel-related rosters					C	S	MED		S
	MP.3 Produce periodic personnel-related reports					C	S	MED		S
	I.1 Prepare periodic intelligence reports & summaries	MED				C	C	MED		S
	I.2 Produce target bulletins	SM				C	S	MED		S
	I.3 Produce target-related reports and historical data					C	S	MED		S
	OT.1 Maintain a landing serial file	SM				S	S	SM		S
	OT.2 Produce operational and historical reports	SM		YES		C		MED		S
	OT.3 Monitor unit status for FORSTAT	SM	C			S	S	SM	SM	S
Air Group	L.1 Monitor logistics transactions	MED				S	S	SM		S
	L.2 Monitor supply management for SASSY	SM	C			S	S	SM	MED	S
	L.3 Monitor maintenance management for MIMMS	SM	C			S	S	SM	MED	S
	L.4 Monitor reporting of sick, injured, wounded	SM				S		SM		S
	MP.1 Maintain a current unit diary	SM				S	S	MED	MED	S
	MP.2 Produce personnel-related rosters					C		MED		S
	MP.3 Produce periodic personnel-related reports					C	S	MED		S
	I.1 Prepare periodic intelligence reports & summaries	MED	S			C	C	MED		S
	I.2 Produce target bulletins	SM				C	S	MED		S
	I.3 Produce target-related reports and historical data					C	S	MED		S
	OT.1 Prepare operational and historical reports	SM				S		SM		S
	OT.2 Monitor daily air operations	SM				S	S	SM		S
	OT.3 Monitor post-flight reports	SM				S	S	SM		S
	OT.4 Monitor unit status for FORSTAT	SM	C			S	S	SM	SM	S
	OT.5 Monitor aircraft statistical data for FREDS	MED	C			S	S	MED	MED	S
	L.1 Monitor aviation supply and parts requisitions	SM				S	S	MED		S
	L.2 Monitor daily aircraft maintenance activity	SM				S	S	MED		S
	L.3 Monitor aviation maintenance, material, usage for 3M	MED	C			C	C	MED	MED	S
	L.4 Monitor supply/fiscal management for SUADPS-EU	MED	C			C	C	MED	MED	S

Table 12
AFLOAT MONITORING/INVENTORYING REQUIREMENTS (Continued)

		Required Data Processing Functions									
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display	
Air Group (cont.)	LSG	L.5 Monitor supply management for SASSY	SM	C			C			MED	S
		L.6 Report sick, injured, wounded	SM	S			S			SM	S
		MP.1 Maintain a current unit diary	SM				S			MED	S
		MP.2 Produce personnel-related rosters					C			MED	S
	Battalion	MP.3 Produce periodic personnel-related reports					C			MED	S
		OT.1 Prepare operational and historical reports	SM				S			SM	S
		OT.2 Monitor unit status for FORSTAT	SM	C			S			SM	S
		L.1 Monitor repair parts levels for critical items	SM				S			SM	S
		L.2 Monitor supply management for SASSY	MED	C			S			MED	S
		L.3 Monitor maintenance management for MIMMS	MED	C			S			MED	S
Squadron	Battalion	L.4 Maintain medical-related records	SM				S			MED	S
		MP.1 Maintain a current unit diary	SM	C			S			SM	S
		MP.2 Produce personnel-related rosters					C			MED	S
		I.1 Prepare periodic intelligence reports & summaries	SM		YES		C			MED	S
	Squadron	OT.1 Produce operational and historical reports	SM		YES		S			SM	S
		OT.2 Monitor unit status for FORSTAT	SM	C			S			SM	S
		L.1 Monitor supplies for shortages	SM				S			SM	S
		L.2 Monitor maintenance activities	SM				S			SM	S
		L.3 Monitor supply management for SASSY	SM	C			S			SM	S
		L.4 Monitor maintenance management for MIMMS	SM	C			S			SM	S
Squadron	Squadron	MP.1 Maintain current unit diary	SM	C			S			MED	S
		MP.2 Produce personnel-related rosters					C			MED	S
		I.1 Prepare periodic intelligence reports & summaries	SM		YES		C			MED	S
		OT.1 Produce operational and historical reports	SM				C			SM	S
		OT.2 Monitor unit status for FORSTAT	SM		YES		S			SM	S
		OT.3 Monitor post-flight reports	SM	C			S			SM	S
		OT.4 Monitor aircraft statistical data for FREDS	MED	C			S			MED	S

Table 12
AFLOAT MONITORING/INVENTORYING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Squadron (cont.)	L.1 Monitor daily aircraft maintenance activity	SM				S	S	SM		S
	L.2 Monitor aviation maintenance, material, usage for 3M	MED	C			S	S	MED	MED	S
	L.3 Monitor supply/fiscal management for SUADPS-EU	MED	C			S	S	MED	MED	S
	L.4 Monitor supply management for SASSY	SM	C			S	S	SM	SM	S
LSU	MP.1 Maintain current unit diary	SM	C			S	S	MED		S
	MP.2 Produce personnel-related rosters					C		MED		S
	OT.1 Produce operational and historical reports	SM		YES		C		SM		S
	OT.2 Monitor unit status for FORSTAT	SM	C			S	S	SM	SM	S
	L.1 Monitor supply management for SASSY	SM	C			S	S	MED	MED	S
	L.2 Monitor maintenance management for WINMS	SM	C			S	S	MED	MED	S

Table 13

AFLOAT FORECASTING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Forecast casualties & replacement requirements	SM			SM	S		SM		S
	OT.1 Forecast enemy capabilities and vulnerabilities	SM			SM	C		MED		S
	OT.2 Forecast weapon system availability	SM			MED	S	S	SM		S
	OT.3 Forecast ground combat air support requirements	SM			MED	C		MED		S
	OT.4 Forecast naval gunfire support requirements	SM			MED	C		MED		S
	L.1 Estimate operational use of ammunition	SM			MED	S		SM		S
	L.2 Forecast supply and equipment shortages	SM			MED	S	S	SM		S
	MP.1 Forecast casualties & replacement requirements	SM			SM	S		SM		S
Wing	OT.1 Forecast expected aircraft requirements	SM			MED	S		SM		S
	OT.2 Forecast surface AAW weapon requirements	SM			MED	S		SM		S
	OT.3 Forecast aircraft/helicopter/AAW weapon availability	SM			MED	S	S	MED		S
	OT.4 Forecast air defense capability	SM			MED	C		MED		S
	L.1 Estimate operational use of ordinance	SM			MED	S		SM		S
	L.2 Forecast future supply shortages	SM			MED	S	S	SM		S
	L.3 Forecast aviation fuel consumption	SM			MED	S		SM		S
	MP.1 Forecast replacement requirements	SM			SM	S		SM		S
FSSC	OT.1 Forecast logistics supportability of operations	SM			MED	S		SM		S
	OT.2 Forecast personnel shift schedules					S		SM		S
	L.1 Forecast supply shortages & resupply requirements	SM				S		SM		S
	L.2 Forecast maintenance supportability	SM			MED	S		SM		S
Regiment	(No significant requirements identified)									
Air Group	(No significant requirements identified)									
LSG	(No significant requirements identified)									
Battalion	(No significant requirements identified)									
Squadron	(No significant requirements identified)									
LSU	(No significant requirements identified)									

Table 14
AFLOAT SUPERVISING/CONTROLLING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Supervise processing/movement of replacements	SM				S		SM		S
	MP.2 Supervise reporting to JUMPS/MMS	SM	S			S	S	MED		S
	OT.1 Supervise rehearsal activity					S		SM		S
	OT.2 Supervise LVT and LVTH unit employment				SM	S		SM		S
	OT.3 Supervise coordination with naval gunfire					S		SM		S
	OT.4 Supervise reporting to FORSTAI	SM	S			S	S	SM		S
	L.1 Supervise ship loading and unloading				SM	S	S	MED		S
	L.2 Supervise fulfillment of afloat CSS requirements	SM				S	S	MED		S
	L.3 Supervise CSS ADS reporting	SM	C			S	S	MED		S
Wing	MP.1 Supervise processing/movement of replacements	SM				S		SM		S
	MP.2 Supervise reporting to JUMP/MMS	SM	S			S	S	MED		S
	OT.1 Supervise mission requests/assignments					S		SM		S
	OT.2 Supervise collection of historical records	SM		YES		S		MED		S
	OT.3 Supervise assessment of completed air missions					S		SM		S
	OT.4 Supervise reporting to FORSTAI	SM	C			S	S	SM		S
	L.1 Supervise fulfillment of afloat CSS requirements	SM				S	S	MED		S
	L.2 Supervise reporting to 3M, SUADPS-EU, & FREDS	SM	C			S	S	MED		S
	L.3 Supervise SASSY & MIMMS reporting	SM	C			S	S	MED		S
FSSG	MP.1 Supervise processing/movement of replacements	SM				S		SM		S
	MP.2 Supervise reporting to MMS/JUMPS	SM	S			S	S	MED		S
	L.1 Supervise embarkation activities					S				
	L.2 Supervise debarkation activities	MED			MED	S	S	MED		S
	L.3 Supervise CSS ADS reporting	MED	C			S	S	MED		S
Regiment	(No significant requirements identified)									
Air Group	(No significant requirements identified)									
LSG	(No significant requirements identified)									
Battalion	(No significant requirements identified)									

Table 14
AFLOAT SUPERVISING/CONTROLLING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Squadron LSU	(No significant requirements identified) (No significant requirements identified)									

purposes into the following functional domains: manpower (MP), intelligence (I), operations and training (OT), logistics (L), and finance (F).

Assumptions regarding the interpretation of information contained in Tables 9 through 14 as it relates to MAGTF command requirements and to the relationship of these requirements with those of MTACCS and NALCOMIS have been discussed previously in Section II.B.2.

IV FMF REQUIREMENTS IN GARRISON

The garrison environment is the most benign of the three FMF environments in its demands on the information-processing system. Command and management responsibilities are well defined in garrison, and the information-processing activities that support these responsibilities are typically regular, cyclic, and stable. Because the time spent by the FMF in the garrison environment dominates the time spent in other FMF environments, there may be considerable pressure, both within and from outside the Marine Corps, to make efficient use of the information-processing resources.

Information flow follows well established paths in garrison, and the time criticality of the primarily administrative traffic does not approach that of the deployed environments. Components of the garrison information-processing system are primarily at fixed sites, and they have access to timely and high level support.

A. Environment Overview

1. Organizational Factors

The FMF in garrison resides at bases or air stations operated by elements of the Marine Corps Supporting Establishment. At such installations, FMF information-processing is supported both by installation facilities and by resources attached to the FMF. FMF organizations may be fairly permanent or quite transient occupants of these installations. Space and resource limitations within each installation, however, typically cause units within a command to be spread over several sites.

The garrison command structure is a mixture of administrative organization (division, regiments, battalions) and task organization elements (MAF headquarters, FSSG). Each has its own purview and assigned responsibilities with regard to information-processing.

The garrison environment is the environment most completely under Marine Corps control. Whereas in the other operating environments Marine Corps operations may be heavily influenced by other Services' systems and command, garrison Marine Corps systems and procedures--particularly ADS systems and procedures--are predominantly under Marine Corps control.

2. Operations and Activities

Garrison activity is dominated by a broad and extensive training program that includes formalized schools, on-the-job instruction, and combat exercises. The FMF information-processing system is called upon to schedule, facilitate, participate in, and evaluate these activities. Efficient accomplishment of these activities and those necessary for day-to-day management of personnel welfare and equipment resources is an equal responsibility. This responsibility is primarily met through an extensive monitoring and reporting process within each of the functional areas of manpower, operations and training, logistics, and financial management.

3. Major Factors

The overall goals for FMF operations in garrison can be characterized as: (1) readiness, and (2) efficiency. To some extent, those two goals are in conflict, for the maintenance of a high state of readiness often implies some inefficiency in the use of resources, and the desire for efficiency often implies the sacrifice of some types of readiness.

In garrison, many information-processing facilities and amenities are available that are not available in the other environments. Electric power, ADPS maintenance, and equipment repair services are readily available and seldom interrupted. The garrison information-processing operation can rely on having telecommunications links of adequate capacity and high reliability. Backup arrangements in the event of computer failure or the like are usually readily available.

The generally favorable conditions for information-processing in garrison are themselves a potential source of problems for FMF ADPS. The favorable conditions tend to militate against the maintenance of a true state of readiness for transition to other operating environments. There is a tendency to become over-reliant on available facilities and amenities, and there is a considerable tendency to seek day-to-day efficiency at the expense of readiness for deployment. Also, there is a tendency to get involved with a considerable volume of information-processing to produce results that are of some interest and some utility, but that are of questionable essentiality.

B. Requirements Statement

Requirements for information-processing activity in garrison stem from command and management activities undertaken to support FMF administration, to maintain FMF readiness, and to report to higher authorities changes in FMF condition or status. The results of SRI's investigation of these activities are reported in Part B below.

First, major areas of concern for, and the nature of, management functional requirements in garrison are described. This description encompasses the garrison contribution to the second of SRI's three-level hierarchy of information-processing requirements. Following that, specific echelon-level tasks are identified as the day-to-day manifestation of those management responsibilities. Finally, ADS functional and performance requirements are further detailed and associated with each task.

1. Management Functional Requirements

The following paragraphs provide the focus of FMF requirements for command and management ashore as they relate to the six management functions identified in Section I. For each management function, requirements are distinguished as being associated with manpower, intelligence, operations, logistics, or financial responsibilities. The requirements primarily address the command and management responsibilities of the FMF unit commanders and their general/executive staffs, rather than the

tactical control responsibilities of the MAGTF air control and fire control agencies. The following correlations can, therefore, be assumed:

- Manpower management functional requirements are largely derived from FMF commander and C-1/S-1 responsibilities (or special staff responsibilities under the cognizance of the G-1/S-1)
- Intelligence management functional requirements are largely derived from FMF commander and G-2/S-2 responsibilities (or special staff responsibilities under the cognizance of the G-2/S-2)
- Operations management functional requirements are largely derived from FMF commander and G-3/S-3 responsibilities (or special staff responsibilities under the cognizance of the G-3/S-3)
- Logistics management functional requirements are derived both from FMF commander and G-4/S-4 responsibilities (or special staff responsibilities under the cognizance of the G-4/S-4), and from responsibilities of FMF units that are task organized to provide logistics support (for example, the Supply and Maintenance Battalions, or the H&MS)
- Financial management functional requirements are derived from FMF commander and comptroller staff responsibilities.

a. Planning

Planning in garrison is concerned with the future integration of men, material, and training to provide a ready and responsive FMF. Such planning supports the maintenance of unit strength and capability levels. The purpose of the planning efforts is to provide guidelines for sustained allocation, use, and support of garrison activities involving education, operations training, skill training, as well as actual maintenance of equipment and storage of supplies. Planning in garrison involves elements of both near term and long range policy, depending on the echelon level at which it is conducted and its application.

- Manpower planning requirements suited to ADP include those associated with personnel accounting to manage individual and unit strengths, training, and career path development.

- Operations planning requirements suited to ADP include development of tactics, training exercises, and operational procedures for all echelon levels.
- Logistics planning requirements suited to ADP include those that apply planning factors for the development of supply and maintenance SOP.
- Financial planning requirements suited to ADP include an assortment of tasks associated with preparing annual budgets.

b. Programming

Programming in garrison requires the specific assignment of men and material to training and support services that can maintain FMF individual and unit readiness. Major products of the programming activity are the administrative tasks associated with conducting exercises, assigning training and education programs, scheduling rotations, and so on. It is recurrent and cyclic.

- Manpower programming requirements suited to ADP include those involved with implementing personnel assignments, allocation of replacements, and administration of orders.
- Operations programming requirements suited to ADP include those associated with the detailed preparation of training exercises, as well as scheduling and directing training programs in specialty areas.
- Logistics programming requirements suited to ADP include those associated with implementing work schedules, shop schedules, and equipment preventative-maintenance schedules.
- Financial programming requirements suited to ADP include an assortment of tasks associated with preparing guidance, instructions, and directives related to implementing command budgets.

c. Evaluating

Evaluating in garrison requires the assessment of how effectively men and material resources are being used to support training and to promote readiness. It consists primarily of assessing manpower and equipment performance and capability, assessing information requirements

to support deployments or exercises, and analyzing methods for improving combat effectiveness.

- Manpower evaluating requirements suited to ADP include those associated with the determination of unit strengths, personnel assignment and replacement requirements, and priorities for the distribution of personnel resources.
- Operations evaluating requirements suited to ADP include those that analyze effective means for improving operating procedures, increasing responsiveness, and improving estimating procedures.
- Logistics evaluating requirements suited to ADP include those that analyze supply and maintenance activities to assess their performance, capability, and readiness.
- Financial evaluating requirements suited to ADP include assessing budgets, performing cost analyses, and reviewing resource requirements and justifications.

d. Monitoring/Inventorying

Monitoring/inventorying in garrison requires the maintenance of records concerning the status of FMF manpower and material resources, as well as the activities and services that these resources are providing in support of readiness. Two purposes are served by the monitoring/inventorying activity that takes place in garrison. The first is to maintain up-to-date status information locally for direct support of operations, and the second is to report status information externally to higher authorities for general support. This function takes place continuously, and it is aggregated and reported on a time period that varies according to the application that is being addressed.

- Manpower monitoring requirements suited to ADP include those that aid the capture and entry of personnel-related events primarily through the unit diary. External reporting is directed heavily toward JUMPS/MMS input.
- Operations monitoring requirements suited to ADP include those that aid in overviewing the progress of training and education programs, overviewing unit readiness (reporting to FORSTAT), and compiling command historical records.

- Logistics monitoring requirements suited to ADP include those concerned with overseeing the status, location, and condition of combat-essential materiel, maintenance activity, supply requisitions, and medical records. Systematic reporting is directed to SASSY, MIMMS, 3M, and SUADPS-EU.
- Financial monitoring requirements suited to ADP include tasks associated with maintaining pay records, preparing travel vouchers, preparing periodic financial reports, recording obligations and expenditures, and maintaining property account records.

e. Forecasting

Forecasting in garrison requires the estimate of future operational, training, and support activity requirements for men and materiel. The purpose of this effort is to anticipate and correct resource shortages before they occur and to adjust resources in short supply to derive the maximum effectiveness from their application. This is a continuous process in the garrison environment.

- Manpower forecasting requirements suited to ADP include the assessment of future personnel status changes and MOS requirements.
- Operations forecasting requirements suited to ADP include estimating the effects of training on readiness, estimating the consumption of supplies during training exercises, and forecasting future combat needs based on information learned.
- Logistics forecasting requirements suited to ADP include estimating stock supplies, usage rates, the responsiveness of the supply chain, and the operational readiness of equipment and weapon systems.

f. Supervising/Controlling

Supervising/controlling in garrison requires the continuous direction and redirection of men and equipment to perform required services and to maintain readiness. The primary purpose is to relate the progress of scheduled training and workloads to expected performance norms, and to apply corrective actions when shortcomings are determined.

A complementary purpose is to assure that priority items are given due attention and access to resources that may have been previously assigned to lesser priority items. Supervising/controlling in garrison is a near real-time activity.

- Manpower supervising requirements suited to ADP include those associated with the administrative tracking of personnel status and the dissemination of pertinent personnel data.
- Operations supervising requirements suited to ADP include coordinating training activities, controlling training facilities and resources, and overseeing combat exercises.
- Logistics supervising requirements suited to ADP include overseeing maintenance actions and schedules, tracking supply requisitions, and allocating transportation.
- Financial supervising requirements suited to ADP include directing activities of the disbursing office, overseeing execution of the budget, and supervising timekeeping operations.

2. ADS Functional and Performance Requirements

The management functional requirements are further detailed and expanded in the statement of ADS functional and performance requirements reported in the matrix format of Tables 15 through 20. Definitions of the various table categories and performance measures are found in Section I. In addition, the echelon-activity tasks have been grouped for association purposes into the following functional domains: manpower (MP), intelligence (I), operations and training (OT), logistics (L), and finance (F).

Assumptions regarding the interpretation of information contained in Tables 15 through 20 as it relates to MAGTF command requirements and to the relationship of these requirements with those of MTACCS and NALCOMIS have been discussed previously. That discussion appears in Section II.B.2.

Table 15

CARRISON PLANNING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions									
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display	
Division	MP.1 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S	
	MP.2 Plan personnel management & administration							SM		S	
	MP.3 Plan personnel services (religious, postal, welfare)							SM		S	
	OT.1 Plan activation/deactivation of units	SM						SM		S	
	OT.2 Plan organization/operation of schools						SM		S		
	OT.3 Plan unit combat training, inspections, tests						SM		S		
	OT.4 Develop operational contingency plans and SOPs	MED		YES				MED		S	
	OT.5 Develop Ops Plans for exercises			YES		MED		S		S	
	L.1 Plan acquisition, storage, control of supplies/equipment	MED							MED		S
	L.2 Plan maintenance/repair activities								SM		S
L.3 Plan employment of transportation resources								SM		S	
L.4 Plan training in technical & engineering areas								SM		S	
L.5 Develop logistics contingency plans and SOPs				YES				MED		S	
L.6 Develop logistics plans for exercises				YES		MED		S		S	
Wing	F.1 Plan annual budget	SM			MED			S	MED		S
	MP.1 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S	
	MP.2 Plan personnel management & administration	SM			SM			SM		S	
	MP.3 Plan personnel services (religious, postal, welfare)							SM		S	
	OT.1 Plan activation/deactivation of units	SM						SM		S	
	OT.2 Plan organization/operation of schools						SM		S		
	OT.3 Plan air unit training, inspections, tests						SM		S		
	OT.4 Plan ground support training, inspections, tests						SM		S		
	OT.5 Plan surface AMW training, inspections, tests						SM		S		
	OT.6 Develop operational contingency plans and SOPs				YES		S		MED		S
	OT.7 Develop Ops Plans for exercises				YES		S		MED		S
	L.1 Plan acquisition, storage, control of supplies/equipment	SM							MED		S
	L.2 Plan maintenance/repair of aircraft and ground equipment						S		MED		S
	L.3 Plan employment of air transport						S		SM		S
	L.4 Plan employment of ground transportation						S		SM		S

Table 15

GARRISON PLANNING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (cont.)	L.5 Plan training in technical areas					S		SM		S
	L.6 Develop logistics contingency plans and SOPs			YES		S		MED		S
	L.7 Develop logistics plans for exercises	MED		YES	MED	S		MED		S
	F.1 Plan annual budget	SM			MED	S	S	MED		S
	MP.1 Plan procurement/assignment of replacements	SM			SM	C	S	SM		S
FSSG	MP.2 Plan personnel management & administration					S		SM		S
	MP.3 Plan personnel services support (postal, religious, medical)					S		SM		S
	OT.1 Plan activation/deactivation of units					S		SM		S
	OT.2 Plan organization/operation of schools	SM				S		SM		S
	OT.3 Plan CSS unit training, inspections, tests					S		SM		S
	OT.4 Develop operational contingency plans and SOPs			YES		S		MED		S
	OT.5 Develop Ops Plans for exercises	MED		YES	MED	S		MED		S
	L.1 Plan allocation and delivery of supplies/equipment					S		SM		S
	L.2 Plan maintenance/repair support functions	SM				S	S	MED		S
	L.3 Plan technical training & engineering training					S		SM		S
Regiment	L.4 Plan employment of transportation resources					S		SM		S
	L.5 Plan training in technical areas			YES		S		SM		S
	L.6 Develop logistics contingency plans and SOPs			YES	MED	S		MED		S
	L.7 Develop logistics plans for exercises	MED		YES	MED	S		MED		S
	F.1 Plan annual budget	SM			MED	S	S	MED		S
	MP.1 Plan personnel strength control					C		MED		S
	I.1 Plan intelligence training					S		SM		S
	OT.1 Plan command/unit training, inspections, tests					S		SM		S
	OT.2 Develop operational contingency plans and SOPs			YES		S		MED		S
	OT.3 Develop Ops Plans for exercises	MED		YES	MED			MED		S
	L.1 Plan acquisition, storage, control of supplies/equipment					S		MED		S
	L.2 Plan maintenance/repair activities	SM				S	S	SM		S

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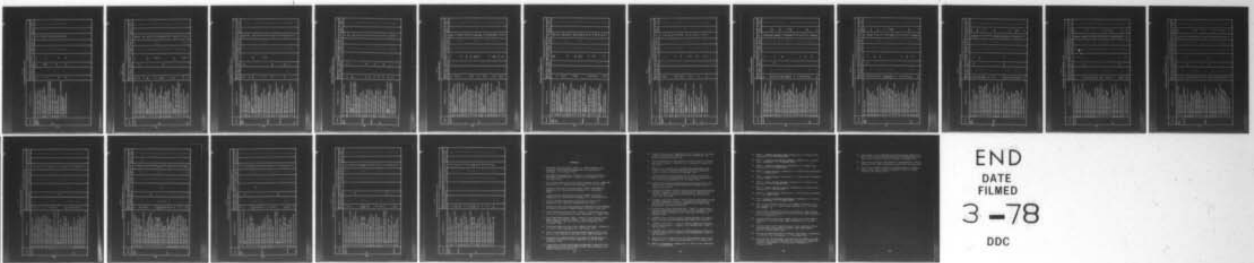
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Table 15
GARRISON PLANNING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/ Validation	Text Hand- ling	Mathematical Calculation	Information Storage/ Retrieval	File Manage- ment	File Storage	Data Trans- mission	Information Output/ Display
Battalion (cont.) Squadron	L.4 Develop logistics plans for exercises	SM		YES	SM	S		SM		S
	MP.1 Plan personnel management & administration					S		SM		S
	I.1 Plan intelligence/reconnaissance training					S		SM		S
	OT.1 Plan eviator training, inspections, tests					S		SM		S
	OT.2 Develop operational contingency plans and SOPs			YES		S		SM		S
	OT.3 Develop Ops Plans for exercises	SM		YES	SM	S		SM		S
	L.1 Plan acquisition, storage, control of supplies/equipment					S		SM		S
	L.2 Plan maintenance/repair of aircraft and ground equipment					S		SM		S
	MP.1 Plan personnel management and administration					S		SM		S
	OT.1 Plan personnel training, inspections, tests					S		SM		S
LSU	OT.2 Develop operations SOPs			YES		S		SM		S
	OT.3 Develop Ops Plans for exercises	SM			SM	S		SM		S
	L.1 Plan acquisition, storage, control of supplies/equipment					S		SM		S
	L.2 Plan maintenance/repair support					S		SM		S
	L.3 Plan transportation support					S		SM		S
	L.4 Develop logistics plans for exercises	SM		YES	SM	S		SM		S

Table 16

GARRISON PROGRAMMING REQUIREMENTS

		Required Data Processing Functions								
Echelon	Representative Activity	Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MF.1 Recommend allocation of replacements	SM			SM	S	S	MED		S
	MF.2 Program personnel status changes & career paths	SM				S		MED		S
	OT.1 Prepare exercise plans & orders	SM		YES		S		MED		S
	OT.2 Program assignment/attachment of units					S		SM		S
	OT.3 Direct unit combat training programs					S		SM		S
	OT.4 Allocate replacements	SM				S		SM		S
	L.1 Direct acquisition, storage, control of supplies/equipment	MED			MED	S		MED		S
	L.2 Establish usage priority for regulated items					S		SM		S
	L.3 Establish usage priority for material in short supply					S		SM		S
	L.4 Direct technical CSS unit training					S		SM		S
Wing	F.1 Prepare budget instructions and directives	SM			SM	S	S	SM		S
	F.2 Program allocated expenditures				SM	S	S	SM		S
	MF.1 Recommend allocation of replacements	SM			SM	S	S	MED		S
	MF.2 Program personnel status changes & career paths	SM				S		MED		S
	OT.1 Prepare exercise plans & orders			YES		S		MED		S
	OT.2 Program assignment/attachment of units					S		SM		S
	OT.3 Direct aviation unit training programs					S		SM		S
	OT.4 Direct surface AMW unit training programs					S		SM		S
	OT.5 Allocate replacements	SM				S		SM		S
	L.1 Direct acquisition, storage, control of supplies/equipment	MED			MED	S		MED		S
FSSC	L.2 Establish usage priority for regulated items					S		SM		S
	L.3 Coordinate aircraft/non-aircraft maintenance functions					S		SM		S
	L.4 Establish usage priority for material in short supply					S		SM		S
	L.5 Direct technical CSS unit training					S		SM		S
	F.1 Prepare budget instructions and directives	SM			SM	S	S	SM		S
	F.2 Program allocated expenditures				SM	S	S	SM		S
	MF.1 Recommend allocation of replacements	SM			SM	S	S	MED		S

Table 16

GARRISON PROGRAMMING REQUIREMENTS (Continued)

Required Data Processing Functions										
Echelon	Representative Activity	Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
FSSC (cont.)	NP.2 Program personnel status changes & career paths	SM				S		MED		S
	OT.1 Prepare exercise plans & orders	SM		YES		S		MED		S
	OT.2 Program assignment/attachment of units					S		SM		S
	OT.3 Direct unit training programs					S		SM		S
	OT.4 Allocate replacements	SM				S		SM		S
	L.1 Direct acquisition, storage, control of supplies/equipment	MED			MED	S		MED		S
	L.2 Schedule delivery of requisitioned supplies/equipment					S		SM		S
	L.3 Direct personnel services (postal, food, facilities)					S		SM		S
	L.4 Program transportation support					S		SM		S
	L.5 Program maintenance support					S		SM		S
Regiment	L.6 Direct technical CSS unit training					S		SM		S
	F.1 Prepare budget instructions and directives	SM			SM	S	S	SM		S
	F.2 Program allocated expenditures				SM	S	S	SM		S
	NP.1 Recommend allocation of replacements									
	NP.2 Direct personnel management procedures & services					S		SM		S
	OT.1 Prepare exercise plans & orders			YES		S		SM		S
	OT.2 Direct unit combat training programs	SM				S		SM		S
	L.1 Coordinate logistics functions with subordinate units					S		SM		S
	L.2 Establish supply/equipment usage priorities					S		SM		S
	NP.1 Recommend allocation of replacements					S		SM		S
Air Group	NP.2 Direct personnel management procedures & services					S		SM		S
	OT.1 Prepare exercise plans & orders			YES		S		MED		S
	OT.2 Direct aviation unit training programs	SM				S		SM		S
	OT.3 Direct surface ANM unit training programs					S		SM		S
	L.1 Coordinate logistics functions with subordinate units					S		SM		S
	L.2 Establish supply/equipment usage priorities					S		SM		S
	NP.1 Recommend allocation of replacements					S		SM		S
	NP.2 Direct personnel management procedures & services					S		SM		S
	OT.1 Prepare exercise plans & orders					S		SM		S
	OT.2 Direct aviation unit training programs					S		SM		S
LAC	OT.3 Direct surface ANM unit training programs					S		SM		S
	L.1 Coordinate logistics functions with subordinate units					S		SM		S
	L.2 Establish supply/equipment usage priorities					S		SM		S
	NP.1 Recommend allocation or replacements					S		SM		S

Table 16

GARRISON PROGRAMMING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
LAC (cont.)	MP.2 Direct personnel management procedures & services					S		SH		S
	OT.1 Prepare exercise plans & orders	SH		YES		S		MOD		S
	OT.2 Direct unit training programs					S		SH		S
	L.1 Coordinate acquisition, storage, control of supplies/equipment	MOD				S		MOD		S
	L.2 Schedule delivery of requisitioned supplies/equipment					S		SH		S
	L.3 Direct personnel services (postal, food, facilities)					S		SH		S
Battalion	L.4 Program transportation support					S		SH		S
	L.5 Program maintenance support					S		SH		S
	L.6 Direct technical CSS unit training					S		SH		S
	MP.1 Direct personnel management & services					S		SH		S
	OT.1 Prepare exercise plans & orders	SH		YES		S		SH		S
	OT.2 Direct unit/individual training programs					S		SH		S
Squadron	L.1 Coordinate logistics functions & services	SH				S		SH		S
	MP.1 Direct personnel management & services					S		SH		S
	OT.1 Prepare exercise plans & orders	SH		YES		S		SH		S
	OT.2 Direct unit/individual training programs					S		SH		S
	L.1 Coordinate logistics functions & services	SH				S		SH		S
	MP.1 Direct personnel management & services					S		SH		S
LSU	OT.1 Prepare exercise plans & orders	SH		YES		S		SH		S
	OT.2 Direct unit/individual training programs					S		SH		S
	L.1 Coordinate logistics functions & services	SH				S		SH		S
	MP.1 Direct personnel management & services					S		SH		S
	OT.1 Prepare exercise plans & orders	SH		YES		S		SH		S
	OT.2 Direct unit/individual training programs					S		SH		S
	L.1 Coordinate acquisition, storage, control of supplies & equipment	SH				S		MOD		S
	L.2 Schedule delivery of requisitioned supplies/equipment					S		SH		S
	L.3 Direct personnel services (postal, food, facilities)	SH				S		SH		S
	L.4 Program transportation support					S		SH		S
	L.5 Program maintenance support					S		SH		S
						S		SH		S

Table 17

CARRISON EVALUATING REQUIREMENTS

Echelon		Representative Activity	Required Data Processing Functions								
			Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	NP.1	Determine replacement requirements	SM			SM	S	S	MOD		S
	NP.2	Determine personnel management requirements					S		MOD		S
	NP.3	Determine personnel skill deficiencies & training requirements	SM				S		SM		S
	NP.4	Determine morale & personnel services requirements	SM				S		SM		S
	OT.1	Determine the requirements for unit combat training	SM				C	S	MOD		S
	OT.2	Evaluate unit combat readiness				SM	S	S	MOD		S
	OT.3	Determine priorities for resources in short supply					S		SM		S
	OT.4	Determine priorities for replacements					S		SM		S
	OT.5	Evaluate unit performance in field exercises				MOD	S		MOD		S
	L.1	Evaluate material/equipment usage trends					S		SM		S
Wing	L.2	Evaluate maintenance performance trends	SM			MOD	S		SM		S
	L.3	Evaluate CSS support of field exercises	SM				S		SM		S
	P.1	Evaluate fiscal resource requirements				MOD	S	S	MOD		S
	P.2	Evaluate fiscal burden of training activities				MOD	S	S	MOD		S
	NP.1	Determine replacement requirements	SM			SM	S	S	MOD		S
	NP.2	Determine personnel management requirements					S		MOD		S
	NP.3	Determine personnel skill deficiencies & training requirements	SM				S		MOD		S
	NP.4	Determine morale & personnel services requirements	SM				S		SM		S
	OT.1	Determine the requirements for unit combat training					C	S	MOD		S
	OT.2	Evaluate unit combat readiness				SM	S	S	MOD		S
	OT.3	Determine priorities for resources in short supply					S		SM		S
	OT.4	Evaluate aircraft usage/availability	SM			MOD	S	S	MOD		S
	OT.5	Evaluate aircraft usage/availability	SM			MOD	S	S	MOD		S
	OT.6	Evaluate aviation support in field exercises					S		SM		S
	L.1	Evaluate aviation data for support/maintenance trends	SM			MOD	S		SM		S
	L.2	Evaluate material/equipment usage trends	SM				S		SM		S
	L.3	Evaluate maintenance performance trends	SM				S		SM		S
	L.4	Evaluate CSS support of field exercises				MOD	S		SM		S

Table 17
CARRISON EVALUATING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (cont.) F28C	F.1 Evaluate fiscal resource requirements				MED	S	S	MED		S
	F.2 Evaluate fiscal burden of training activities				MED	S	S	MED		S
	MP.1 Determine replacement requirements	SH				S		MED		S
	MP.2 Determine personnel management requirements					S		SH		S
	MP.3 Determine personnel skill deficiencies & training requirements	SH				S		MED		S
	MP.4 Determine morale & personnel services requirements	SH				S		MED		S
	OT.1 Determine the requirements for unit training	SH				C	S	MED		S
	OT.2 Evaluate unit combat readiness				SH	S	S	MED		S
	OT.3 Determine priorities for replacements					S		SH		S
	OT.4 Determine priorities for resources in short supply					S		SH		S
Regiment	L.1 Evaluate material/equipment supply trends	SH				S		MED		S
	L.2 Evaluate maintenance performance trends	SH				S		MED		S
	L.3 Evaluate CSS support of field exercises	SH				S		SH		S
	F.1 Evaluate fiscal resource requirements				MED	S	S	MED		S
	F.2 Evaluate fiscal burden of training activities				MED	S	S	MED		S
	MP.1 Determine personnel management requirements					S		MED		S
	MP.2 Determine personnel skill deficiencies & training requirements					S		MED		S
	OT.1 Evaluate unit combat readiness	SH			SH	S	S	SH		S
	OT.2 Evaluate unit performance in field exercises	SH				S		SH		S
	L.1 Evaluate material/equipment supply trends	SH			SH	S		SH		S
Air Group	L.2 Evaluate maintenance performance trends	SH			SH	S		SH		S
	L.3 Evaluate CSS support of field exercises	SH				S		SH		S
	MP.1 Determine personnel management requirements					S		MED		S
	MP.2 Determine personnel skill deficiencies & training requirements					S		MED		S
	OT.1 Evaluate unit combat readiness	SH			SH	S	S	SH		S
	OT.2 Evaluate aircraft usage/availability	SH				S		SH		S

Table 17
GARRISON EVALUATING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Air Group (cont.)	OT.3 Evaluate aviation support in field exercises	SM				S		SM		S
	L.1 Evaluate material/equipment supply trends	SM				S		SM		S
	L.2 Evaluate maintenance performance trends	SM			SM	S		SM		S
	L.3 Evaluate CSS support of field exercises					S		SM		S
LSC	NP.1 Determine personnel management requirements					S		MOD		S
	NP.2 Determine personnel skill deficiencies & training requirements					S		MOD		S
	OT.1 Evaluate unit combat readiness	SM			SM	S	S	SM		S
	OT.2 Evaluate unit performance in field exercises	SM				S		SM		S
Battalion	L.1 Evaluate material/equipment supply trends	SM				S		SM		S
	L.2 Evaluate maintenance performance trends	SM			SM	S		SM		S
	L.3 Evaluate CSS support of field exercises	SM				S		SM		S
	NP.1 Determine personnel skill deficiencies & training requirements									
Squadron	OT.1 Evaluate unit combat readiness	SM			SM	S	S	SM		S
	L.1 Evaluate logistics trends	SM			SM	S		SM		S
	NP.1 Determine personnel skill deficiencies & training requirements					S				
	OT.1 Evaluate unit combat readiness				SM	S	S	SM		S
LSU	L.1 Evaluate logistics trends	SM			SM	S		SM		S
	NP.1 Determine personnel skill deficiencies & training requirements					S				
	OT.1 Evaluate unit combat readiness				SM	S	S	SM		S
	L.1 Evaluate logistics trends				SM	S		SM		S

Table 18

CARRISSON MONITORING/INVENTORYING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	NP.1 Maintain a current master personnel file	MED	S		SM	S	C	LG		C
	NP.2 Compile statistical strength of command information					S		MED		C
	NP.3 Produce personnel-related rosters					S	S	MED		S
	NP.4 Produce periodic personnel status reports					S		MED		S
	NP.5 Monitor personnel unit diary transactions for JUMPS/MMS	MED	C			C	S	MED	LG	C
	NP.6 Monitor T/Os for TMR	SM	C			S		MED	MED	S
	OT.1 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.2 Maintain troop lists	SM	S			S		MED		S
	OT.3 Maintain training records and reports	SM				S		MED		S
	OT.4 Monitor unit status for FORSTAT	SM	C			C	C	MED	MED	S
	L.1 Compile and maintain statistical logistics data	MED	S		MED	S	S	LG		S
	L.2 Monitor supply and parts requisitions	SM				S		SM		S
	L.3 Monitor daily maintenance activity	SM				S		SM		S
	L.4 Monitor supply management for SASSY	MED	C			C	C	MED	LG	
	L.5 Monitor maintenance management for MDMS	MED	C			C	C	MED	LG	
	L.6 Monitor material management for MOWS	SM	C			C	S	MED	MED	S
	L.7 Compile data pertaining to movement of the command					S		SM		S
	L.8 Maintain motor transport records	SM				S		SM		S
	L.9 Maintain ammunition and weapons inventories					S		SM		S
	L.10 Maintain medical-related records	SM					S	SM		S
	F.1 Maintain required financial records	SM				SM	S	S	SM	S
	F.2 Register allotments and deposits	SM					S		SM	S
	F.3 Prepare disbursing reports and returns	SM					S	S	SM	S
	F.4 Collect and coordinate statistical fiscal data	SM				MED	S		SM	S
	F.5 Report MACFAMS information	SM					S	S	SM	MED
Wing	NP.1 Maintain a current master personnel file	Med	S		SM	S	C	LG		C
	NP.2 Compile statistical strength of command information					S		MED		C
	NP.3 Produce personnel-related rosters					S	S	MED		S
	NP.4 Produce periodic personnel status reports					S		MED		S
	NP.5 Monitor personnel unit diary transactions for JUMPS/MMS	MED	C			C	S	MED	LG	C

Table 18

GARRISON MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (cont.)	MP.6 Monitor T/Os for TNR	SM	C			S		MED	MED	S
	OT.1 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.2 Maintain training records and reports	SM				S	S	MED		S
	OT.3 Monitor unit status for FORSTAT	SM	C			S	S	MED	MED	S
	OT.4 Monitor aircraft availability status	SM				S		SM		S
	OT.5 Monitor daily flight activity	SM			MED	S	S	SM		S
	OT.6 Monitor post-flight reports	SM				S	S	SM		S
	OT.7 Monitor aircraft statistical data for FREDIS	MED	C			S	S	MED	MED	S
	L.1 Compile and maintain statistical logistics data	LG	S		MED	C	C	LG		C
	L.2 Monitor logistic/transport aircraft usage					S		SM		S
	L.3 Monitor aviation supply for SUADPS-EU	MED	C			C	C	LG	LG	C
	L.4 Monitor daily aircraft maintenance activity	MED				S		SM		S
	L.5 Monitor aviation maintenance, material, usage for SM	MED	S			S	S	MED	LG	S
	L.6 Monitor ground supply management for SASSY	MED	C			C	C	LG	LG	C
	L.8 Monitor maintenance management for MUMS	MED	C			C	C	MED	MED	C
	L.9 Monitor material management for MUMS	SM	C			C	C	MED	MED	C
	L.10 Compile data pertaining to movement of the command					S		SM		S
	L.11 Maintain motor transport records	SM				S		SM		S
	L.12 Maintain aviation ordnance inventories					S		SM		S
FSSG	L.13 Maintain medical-related records	SM				S	S	SM		S
	F.1 Maintain required financial records	SM			SM	S	S	SM		S
	F.2 Register allotments and deposits	SM				S	S	SM		S
	F.3 Prepare disbursing reports and returns	SM				S	S	SM		S
	F.4 Collect and coordinate statistical fiscal data	SM			MED	S	S	SM		S
	F.5 Report NAZ/AMS information	SM				S	S	SM	MED	S
	MP.1 Maintain a current master personnel file									
	MP.2 Compile statistical strength of command information	MED	S		SM	S	C	LG		C
	MP.3 Produce personnel-related rosters					S	S	MED		C
	MP.4 Produce periodic personnel status reports					S	S	MED		S
	MP.5 Monitor personnel transactions (unit diaries) for MMS	MED	C			C	S	MED	LG	C

Table 18

GARRISON MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
PFSC (cont.)	MP.6 Monitor I/Os for TNR	SM	C			S		MED	MED	S
	OT.1 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.2 Maintain training records and reports	SM				S		MED		S
	OT.3 Monitor unit status for FORSTAT	SM	C			C	C	MED	MED	S
	L.1 Compile and maintain statistical logistics data	MED	S		MED	C	C	LC		C
	L.2 Monitor repair parts levels for critical items	SM				S		SM		S
	L.3 Provide centralized ADS for supply (SASSY)	MED	C			C	C	LC	LC	C
	L.4 Provide centralized ADS for maintenance (MIMS)	MED	C			C	C	LC	LC	C
	L.5 Compile data pertaining to movement of the command					S		SM		S
	L.6 Maintain motor transport records	SM				S	S	SM		S
Regiment	L.7 Maintain ammunition/ordnance inventories					S	S	SM		S
	L.8 Maintain medical-related records	SM				S		SM		S
	MP.1 Maintain a current unit diary for JUMPS/MMS input	SM	S			S	S	MED	MED	S
	MP.2 Produce personnel-related rosters					S	S	MED		S
	MP.3 Compile statistical strength of command information					C		MED		S
	MP.4 Produce periodic personnel-related reports					S		MED		S
	I.1 Maintain library of resource materials & intelligence					S		MED		S
	OT.1 Prepare operational and historical reports	MED		YES	SM	S	S	MED		S
	OT.2 Maintain troop lists	SM	S			S		MED		S
	OT.3 Maintain training records and reports	SM				S		MED		S
	OT.4 Monitor unit status for FORSTAT	SM	S			S	S	SM	SM	S
	L.1 Monitor supply and parts requisitions	SM				S		SM		S
	L.2 Monitor daily maintenance activity	SM				S		SM		S
	L.3 Monitor supply management for SASSY	SM	S			S	S	MED	SM	S
	L.4 Monitor maintenance management for MIMS	SM	S			S	S	MED	SM	S
	L.5 Monitor material management for MIMS	SM				S	S	SM	SM	S
	L.6 Maintain motor transport records	SM				S		SM		S
	L.7 Maintain ammunition and weapons inventories					S		SM		S
	F.1 Report MACFARS information	SM				S		SM	SM	S

Table 18

GARRISON MONITORING/INVENTORYING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Air Group	NP.1 Maintain a current unit diary for JUMPS/MMS input	SM	S			S	S	MED	MED	S
	NP.2 Produce personnel-related rosters					S	S	MED		S
	NP.3 Compile statistical strength of command information					C		MED		S
	NP.4 Produce periodic personnel-related reports					S		MED		S
	I.1 Maintain library of resource materials & intelligence					S		MED		S
	OT.1 Prepare operational and historical reports	MED		YES	SM	S		MED		S
	OT.2 Maintain training records and reports	SM				S		MED		S
	OT.3 Monitor unit status for FORSTAY	SM	C			S	S	SM	SM	S
	OT.4 Monitor aircraft availability status	SM				S		SM		S
	OT.5 Monitor daily flight activity	SM				S		SM		S
	OT.6 Monitor post-flight reports									
	OT.7 Monitor aircraft statistical data for FREDS	MED	C			S	S	MED	SM	S
	L.1 Monitor aviation supply and parts requisitions	SM				S		SM		S
	L.2 Monitor daily aircraft maintenance activity					S		SM		S
LSC	L.3 Monitor aviation maintenance, material, usage for SM	MED				S		SM		S
	L.4 Monitor ground supply management for SASSY	SM	S			S	S	MED	SM	S
	L.5 Maintain motor transport records					S		SM		C
	L.6 Monitor maintenance management for MUMMS	SM	S			S	S	MED	SM	S
	L.7 Monitor material management for MUMMS	SM	S			S	S	SM	SM	S
	F.1 Report MAGZARS information	SM				S		SM		S
	NP.1 Maintain a current unit diary for JUMPS/MMS input	SM	S			S	S	MED	MED	S
	NP.2 Produce personnel-related rosters					S	S	MED		S
	NP.3 Compile statistical strength of command information					C		MED		S
	NP.4 Produce periodic personnel-related reports					S		MED		S
	OT.1 Prepare operational and historical reports	MED		YES	SM	S		MED		S
	OT.2 Maintain training records and reports	SM				S		MED		S
	OT.3 Monitor unit status for FORSTAY	SM	C			S	S	SM	SM	S
	L.1 Monitor repair parts levels for critical items	SM			SM	S		SM		S
L.2 Provide centralized ADS for supply (SASSY)	MED	C			C	C	MED	MED	C	

Table 18

GARRISON MONITORING/INVENTORING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions									
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display	
LSG (cont.)	L.3 Provide centralized ADS for maintenance (MIMMS)	MED	C			C	C	MED	MED	C	
	L.4 Main ain motor transport records	SM				S	S	SM		S	
	L.5 Maintain medical-related records	SM				S	S	SM		S	
	MP.1 Maintain current unit diary for JUMPS/MMS input	SM	S			S	S	MED		S	
Battalion	MP.2 Produce personnel-related rosters					S	S	SM		S	
	OT.1 Prepare operational and historical reports	MED		YES	SM	S	S	SM		S	
	OT.2 Maintain troop lists	SM				S	S	SM		S	
	OT.3 Maintain training records and reports	SM				S	S	SM		S	
	OT.4 Monitor unit status for FORSTAI	SM	S			S	S	SM	S	S	
	L.1 Monitor supply management for SASSY	SM	S			S	S	SM	SM	S	
	L.2 Monitor maintenance management for MIMMS	SM	S			S	S	SM	SM	S	
	L.3 Monitor material management for MIMMS	SM	S			S	S	SM		S	
	L.4 Maintain motor transport records	SM				S	S	SM		S	
	F.1 Report MAGZAMS information	SM				S	S	SM	SM	S	
	Squadron	MP.1 Maintain current unit diary for JUMPS/MMS input	SM	S			S	S	MED	SM	S
		MP.2 Produce personnel-related rosters					S	S	SM		S
OT.1 Prepare operational and historical reports		MED		YES	SM	S	S	SM		S	
OT.2 Maintain training records and reports		SM				S	S	SM		S	
OT.3 Monitor unit status for FORSTAI		SM	S			S	S	SM	SM	S	
OT.4 Monitor post-flight reports		SM				S	S	SM		S	
OT.5 Monitor aircraft statistical data for FREDS		MED	S			S	S	MED	MED	S	
L.1 Monitor aircraft maintenance activity		SM				S	S	SM		S	
L.2 Monitor aviation maintenance, material, usage for 3M		MED	S			S	S	SM	SM	S	
L.3 Monitor ground supply management for SASSY		SM	S			S	S	SM	SM	S	
L.4 Monitor maintenance management for MIMMS		SM	S			S	S	SM	SM	S	
L.5 Monitor material management for MIMMS		SM	S			S	S	SM	SM	S	
L.6 Monitor motor transport records	SM				S	S	SM		S		
F.1 Report MAGZAMS information	SM				S	S	S	SM	S		

Table 19

GARRISON FORECASTING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Forecast replacement requirements					S		SM		S
	MP.2 Forecast education requirements of the command					S		SM		S
	OT.1 Forecast unit readiness				MED	C		MED		S
	OT.2 Forecast training schedule requirements				SM	S		SM		S
	OT.3 Forecast usage of training equipments and facilities					S		SM		S
	OT.4 Forecast ammunition/weapons usage					S		SM		S
	L.1 Forecast supply and equipment shortages	SM			MED	S		MED		S
	L.2 Forecast supply usage rates				MED	S		SM		S
	L.3 Forecast logistics support requirements	SM			MED	S		SM		S
	F.1 Forecast budgetary requirements				SM	S	S	SM		S
Wing	F.2 Forecast equipment/facility replacement or upkeep				MED	S	S	SM		S
	MP.1 Forecast replacement requirements					S		SM		S
	MP.2 Forecast education requirements of the command					S		SM		S
	OT.1 Forecast unit readiness				MED	C		MED		S
	OT.2 Forecast training schedule requirements				SM	S		SM		S
	OT.3 Forecast usage of training equipments and facilities					S		SM		S
	OT.4 Forecast aircraft availability	SM				S		SM		S
	OT.5 Forecast aviation ordinance usage					S		SM		S
	L.1 Forecast supply and equipment shortages	SM			MED	S		MED		S
	L.2 Forecast supply usage rates				MED	S		SM		S
FSSG	L.3 Forecast logistics support requirements	SM			MED	S		SM		S
	L.4 Forecast aviation fuel requirements					S		SM		S
	F.1 Forecast budgetary requirements				SM	S	S	SM		S
	F.2 Forecast equipment/facility replacement or upkeep				MED	S	S	SM		S
	MP.1 Forecast replacement requirements					S		SM		S
	MP.2 Forecast education requirements of the command					C		MED		S
	OT.1 Forecast unit readiness				MED	C		MED		S
	OT.2 Forecast training schedule requirements				SM	S		SM		S
	OT.3 Forecast usage of training equipments and facilities					S		SM		S

Table 19
GARRISON FORECASTING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
FSSG (cont.)	L.1 Forecast supply and equipment shortages	SM			MED	S		MED		S
	L.2 Forecast supply usage rates				MED	S		SM		S
	L.3 Forecast logistics support requirements	SM			MED	S		SM		S
	L.4 Forecast fuel usage					S		SM		S
Regiment	F.1 Forecast budgetary requirements				SM	S	S	SM		S
	F.2 Forecast equipment/facility replacement or upkeep				MED	S	S	SM		S
	(No significant requirements identified)									
	(No significant requirements identified)									
Air Group	(No significant requirements identified)									
LSG	(No significant requirements identified)									
Battalion	(No significant requirements identified)									
Squadron	(No significant requirements identified)									
LSU	(No significant requirements identified)									

Table 20
GARRISON SUPERVISING/CONTROLLING REQUIREMENTS

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Division	MP.1 Supervise processing/movement of replacements	SM				S		SM		S
	MP.2 Supervise reporting to JUMPS/MMS	SM	S			S	S	MED		S
	MP.3 Supervise maintenance of training records	SM				S		SM		S
	MP.4 Supervise personnel management related activities					S		SM		S
	MP.5 Supervise maintenance of administrative files	SM				S		SM		S
	MP.6 Supervise personnel special services matters					S		SM		S
	MP.7 Supervise troop information & education programs					S		SM		S
	OT.1 Supervise training programs, orders, and exercises	SM				S	S	SM		S
	OT.2 Supervise the organization/operation of schools					S		SM		S
	OT.3 Coordinate training, inspections, and tests					S		SM		S
	OT.4 Supervise collection of historical records	SM				C	S	MED		S
	OT.5 Supervise reporting to FORSTAT	SM	C			S	S	SM		S
	L.1 Supervise procuring, storing, distribution of supplies	SM				S	S	SM		S
	L.2 Supervise medical services	SM				S		SM		S
	Wing	L.3 Supervise the development and dissemination of logistics SOPs			YES		S		SM	
L.4 Supervise personnel qualification training						S		SM		S
L.5 Supervise maintenance functions						S		SM		S
L.6 Supervise usage of ammunition, weapons, ordnance						S		SM		S
L.7 Supervise reporting to SASSY, MIMMS, & MUMMS						S	S	SM		S
F.1 Supervise fiscal accounting operations		MED	S			S	S	MED		S
F.2 Supervise disbursing operations		SM	S		SM	S	S	SM		S
F.3 Supervise reporting to MACFARS		SM	S			S		SM		S
MP.1 Supervise processing/movement of replacements		SM				S		SM		S
MP.2 Supervise reporting to JUMPS/MMS		SM	S			S	S	MED		S
MP.3 Supervise maintenance of training records		SM				S		SM		S
MP.4 Supervise personnel management related activities						S		SM		S
MP.5 Supervise maintenance of administrative files						S		SM		S
MP.6 Supervise personnel special services matters		SM				S		SM		S
MP.7 Supervise troop information & education programs						S		SM		S

Table 20
GARRISON SUPERVISING/CONTROLLING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Wing (cont.)	OT.1 Supervise training programs, orders, and exercises	SM				S	S	SM		S
	OT.2 Supervise the organisation/operation of schools					S		SM		S
	OT.3 Coordinate training, inspections, and tests					S		SM		S
	OT.4 Supervise collection of historical records	SM				C	S	MED		S
	OT.5 Supervise reporting to FORSTAT	SM	C			S	S	SM	SM	S
	L.1 Supervise procuring, storing, distributing of supplies	SM				S	S	SM		S
	L.2 Supervise medical services	SM				S		SM		S
	L.3 Supervise aviation logistics functions	SM				S		SM		S
	L.4 Supervise management of avionics test equipment					S		SM		S
	L.5 Supervise development/dissemination of logistics SOPs			YES		S		SM		S
FSSG	L.6 Supervise personnel qualification training					S		SM		S
	L.7 Supervise maintenance functions					S		SM		S
	L.8 Supervise usage of aircraft, weapons, ordnance	SM				S		SM		S
	L.9 Supervise reporting to 3M, SUADPS-EU, & FREDS	MED	S			S	S	MED		S
	L.10 Supervise reporting to BASSY, NIMOS, & MUMOS	MED	S			S	S	MED		S
	F.1 Supervise fiscal accounting operations	SM	S		SM	S	S	SM		S
	F.2 Supervise disbursing operations	SM	S			S		SM		S
	F.3 Supervise reporting to MAGFARS	SM	S			S		SM		S
	NP.1 Supervise processing/movement of replacements	SM				S		SM		S
	NP.2 Supervise reporting to JUMPS/MS	SM	S			S	S	MED		S
	NP.3 Supervise maintenance of training records	SM				S		SM		S
	NP.4 Supervise personnel management related activities					S		SM		S
	NP.5 Supervise maintenance of administrative files	SM				S		SM		S
	NP.6 Supervise personnel special services matters					S		SM		S
	NP.7 Supervise troop information & education programs					S		SM		S
	OT.1 Supervise training programs, orders, and exercises	SM				S	S	SM		S
	OT.2 Supervise the organisation/operation of schools					S		SM		S
	OT.3 Coordinate training, inspections, and tests					S		SM		S
	OT.4 Supervise collection of historical records	SM				C	S	MED		S
	OT.5 Supervise reporting to FORSTAT	SM	C			S	S	SM		S

Table 20

GARRISON SUPERVISING/CONTROLLING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
FSSC (cont.)	L.1 Supervise procuring, storing, distributing of supplies	SM				S	S	SM		S
	L.2 Supervise medical services	SM				S		SM		S
	L.3 Supervise the development and dissemination of logistics SOPs									
	L.4 Supervise personnel qualification training			YES		S		SM		S
	L.5 Supervise maintenance functions					S		SM		S
	L.6 Supervise usage of ammunition, weapons, ordnance					S		SM		S
	L.7 Supervise reporting to SASSY, MIMWS, & MUMWS					S		SM		S
	L.8 Supervise ADP facility operations	MED	S			S	S	MED		S
Regiment	F.1 Supervise fiscal accounting	SM			SM	S	S	SM		S
	F.2 Supervise disbursing operations	SM	S			S		SM		S
	F.3 Supervise reporting to MAGFARS	SM	S			S		SM		S
	MP.1 Supervise reporting to JUMPS/WMS	SM	S			S		SM		S
	MP.2 Supervise maintenance of training records	SM				S		SM		S
	MP.3 Supervise maintenance of administrative files					S		SM		S
	OT.1 Supervise training programs, orders, and exercises	SM				S		SM		S
	OT.2 Coordinate training, inspections, and tests					S		SM		S
	OT.3 Supervise collection of historical records	SM				C	S	SM		S
	OT.4 Supervise reporting to FORSTAT	SM	S			S	S	SM		S
	L.1 Supervise procuring, storing, distributing of supplies	SM				S		SM		S
	L.2 Supervise the development and dissemination of logistics SOPs									
Air Group	L.3 Supervise personnel qualification training					S		SM		S
	L.4 Supervise maintenance functions					S		SM		S
	L.5 Supervise usage of ammunition, weapons, ordnance			YES		S		SM		S
	L.6 Supervise reporting to SASSY, MIMWS, & MUMWS					S	S	MED		S
	MP.1 Supervise reporting to JUMPS/WMS	SM	S			S		SM		S
	MP.2 Supervise maintenance of training records	SM				S		SM		S
	MP.3 Supervise maintenance of administrative files					S	S	SM		S
	OT.1 Supervise training programs, orders, and exercises	SM				S		SM		S

Table 20
GARRISON SUPERVISING/CONTROLLING REQUIREMENTS (Continued)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Air Group (cont.)	OT.2 Coordinate training, inspections, and tests	SM				S		SM		S
	OT.3 Supervise collection of historical records	SM				C	S	SM		S
	OT.4 Supervise reporting to FORSTAT	SM	S			S	S	SM		S
	L.1 Supervise procuring, storing, distributing of supplies					S		SM		S
	L.2 Supervise aviation logistics functions					S		SM		S
	L.3 Supervise management of avionics test equipment					S		SM		S
	L.4 Supervise development/dissemination of logistics SOPs			YES		S		SM		S
	L.5 Supervise personnel qualification training					S		SM		S
	L.6 Supervise maintenance functions					S		SM		S
	L.7 Supervise usage of aircraft, weapons, ordnance	SM				S		SM		S
LSC	L.8 Supervise reporting to SM, SUADPS-EU, & FREDS	MED	S			S	S	MED		S
	L.9 Supervise reporting to SASSY, MINMS, & MINMS	MED	S			S	S	MED		S
	NP.1 Supervise reporting to JUMPS/VMS	SM	S			S		SM		S
	NP.2 Supervise maintenance of training records	SM				S		SM		S
	NP.3 Supervise personnel management related activities					S		SM		S
	NP.4 Supervise maintenance of administrative files					S		SM		S
	NP.5 Supervise personnel special services matters					S		SM		S
	OT.1 Supervise training programs, orders, and exercises	SM				S		SM		S
	OT.2 Coordinate training, inspections, and tests					S		SM		S
	OT.3 Supervise collection of historical records	SM				C	S	SM		S
Battalion	OT.4 Supervise reporting to FORSTAT	SM	S			S	S	SM		S
	L.1 Supervise procuring, storing, distribution of supplies	SM				S		SM		S
	L.2 Supervise the development and dissemination of logistic SOPs			YES		S		SM		S
	L.3 Supervise personnel qualification training					S		SM		S
	L.4 Supervise maintenance functions					S		SM		S
	L.5 Supervise usage of ammunition, weapons, ordnance					S		SM		S
	NP.1 Supervise reporting to JUMPS/VMS	SM	S			S		SM		S
	NP.2 Supervise maintenance of training records	SM				S		SM		S
	NP.3 Supervise maintenance of administrative files					S		SM		S

Table 20

GARRISON SUPERVISING/CONTROLLING REQUIREMENTS (Concluded)

Echelon	Representative Activity	Required Data Processing Functions								
		Source Data Entry	Data Correction/Validation	Text Handling	Mathematical Calculation	Information Storage/Retrieval	File Management	File Storage	Data Transmission	Information Output/Display
Battalion (cont.)	OT.1 Supervise training programs, orders, and exercises	SM				S		SM		S
	OT.2 Coordinate training, inspections, and tests					S		SM		S
	OT.3 Supervise reporting to FORSTAT	SM	S			S	S	SM		S
Squadron	L.1 Supervise procuring, storing, distribution of supplies	SM				S		SM		S
	L.2 Supervise reporting to SASSY, MIMMS, & MUMMS	MED	S			S	S	MED		S
	NP.1 Supervise reporting to JUMPS/MMS	SM	S			S		SM		S
	NP.2 Supervise maintenance of training records	SM				S		SM		S
	NP.3 Supervise maintenance of administrative files					S		SM		S
	OT.1 Supervise training programs, orders, and exercises	SM				S		SM		S
	OT.2 Coordinate training, inspections, and tests					S		SM		S
	OT.3 Supervise reporting to FORSTAT	SM				S	S	SM		S
	LSU	L.1 Supervise procuring, storing, distribution of supplies	SM				S		SM	
L.2 Supervise reporting to SM, SUADPS-EU & FREDS		MED	S			S	S	MED		S
L.3 Supervise reporting to SASSY, MIMMS & MUMMS		MED	S			S	S	MED		S
NP.1 Supervise reporting to JUMPS/MMS		SM	S			S		SM		S
NP.2 Supervise maintenance of training records		SM				S		SM		S
NP.3 Supervise maintenance of administrative files						S		SM		S
OT.1 Supervise training programs, orders, and exercises		SM				S		SM		S
OT.2 Coordinate training, inspections, and tests						S		SM		S
OT.3 Supervise reporting to FORSTAT		SM	S			S	S	SM		S
L.1 Supervise procuring, storing, distribution of supplies		SM				S		SM		S
L.2 Supervise personnel qualification training						S		SM		S
L.3 Supervise maintenance functions						S		SM		S
	L.4 Supervise reporting to SASSY, MIMMS, & MUMMS	MED	S			S	S	MED		S

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